ABSTRACT OF

Lecture

ON

CLINICAL STUDY.

Delivered at the Liverpool Royal Infirmary,

BY A. T. H. WATERS, M.D., F.R.C.P.,

PHYSICIAN TO THE INFIRMARY.

GENTLEMEN,—I wish to call your attention to-day, not specially to any of the cases in the hospital, but to the subject of clinical study. It will be my duty, during the next few months, to give you a course of clinical lectures independently of clinical instruction in the wards. I am anxious therefore that this, the first occasion of our meeting, should be devoted to an endeavour on my part to enlist your interest in this portion of your work, and to point out to you its paramount importance. All the other studies in which you are or have been engaged are but introductory to that of disease at the bedside, and must be made subservient to it. It is in the wards and in the clinical lecture room that you will see the living examples of the various affections which are treated of in your theoretical discourses on medicine and surgery, that you will learn the practical application of the principles of diagnosis, and that you will be able to observe the manner in which disease or accident becomes amenable to treatment or baffles the skill of the physician or surgeon. And let me tell you that if you wish to become successful practitioners of medicine you must begin early to observe the phenomena of disease, to familiarise yourselves with its various aspects, and to learn the manner in which the examination of a patient should be conducted.

I do not think that the student of the present day is overtasked as regards attendance on theoretical lectures, nor are the requirements in this direction such as to prevent his daily visit to the wards. There has been, in fact, a tendency of late to curtail very largely the more formal lectures, and to give a practical character to our teaching. Indeed, the examinations of our licensing boards are now of a nature to test, much more than was formerly the case, the practical knowledge which a man possesses; and if the system of making candidates for a diploma examine cases of disease, and perform some of the manipulations of surgery, become more general, it cannot fail to have a beneficial influence on the education in our schools of medicine. A step in the right direction has recently been taken by the College of Surgeons, for which it deserves all credit, in reference to the study of practical surgery and practical physiology.

Your clinical studies, gentlemen, should be carried on in a carefully regulated manner, and let me now give you a few words of advice in reference to this subject. In the wards of this hospital you will have ample opportunities of seeing almost every variety of disease, but I would warn you against the notion that you can learn to practise your profession by hurriedly looking at a large number of cases. It is not by a rapid survey of numerous patients that you will learn to estimate aright the nature of their symptoms, or the treatment which is applicable to them, but by a careful study of a few; and the plan which you ought, in my opinion, to adopt is, to take in the first place those cases which are well marked instances of their kind; to note accurately and regularly from day to day all the details of each case, and record them at the time in your note-book. Do not attempt too much at once. Take a few cases of disease of some organ, or of some general malady, as acute rheumatism, and make them for the time the subjects of your special study. Let nothing interfere with your daily visit to these cases, and especially make a point of being present when the physician under whose care the patients are placed goes his rounds. You will gain from him his opinion of the nature of the cases, and the progress which they are making. You can compare the opinion which you have formed with his, and have your views corrected or confirmed by his more matured judgment. Moreover, if you are in doubt as to any particular symptoms he will be quite ready to assist you in reference to them. It is not to be expected that, during the early period of your attendance on hospital practice, you should give an undivided attention to your clinical work, or be able to appreciate, as you will after you have been well grounded in your anatomical, physiological, and other studies, the features of disease or the nature of surgical lesions. But let not these circumstances prevent you from regularly attending, from the very commencement of your hospital career, the clinical lectures and the clinical instruction in the wards. And with reference to the latter part of your time here, when you have passed your preliminary examination, a very large share of your attention should be given to clinical work. It is then that you should take the office of clinical clerk, and devote yourselves assiduously to the duties which it involves. The appointment of clinical clerk is one of great value, but it depends upon yourselves how far you profit by it. Some, if not all, of the examining boards require that a student shall have filled this office before he can be admitted to examination for a diploma. This is a wise regulation. But before you undertake the duties of a clinical clerk you should have prepared yourselves for the work by taking your own notes of cases; you will thus not only render yourselves much more useful to your physician, but you will derive far more benefit from your clerkship than you otherwise could.

One word with reference to the attendance on post-mortem examinations. You should never fail to be present at these examinations. If you have watched the progress of a patient during life you will gain information of the most valuable kind from a study of the appearances which the autopsy reveals. But of what avail will these be to you if you see the case for the first time in the dead-house, or if you do not carry there with you a well-grounded knowledge of healthy structure.

And with regard to case-taking. This is the most important part of your clinical work. It is that which, after the primary difficulties are overcome, will be the most interesting to you. It is impossible for you to estimate the nature or progress of cases without carefully placing them on record in language of your own. The cases of which you preserve notes will dwell in your memory in after-years, and will serve as references in the treatment of cases of a similar character. Many of you, when you have once passed from your school and obtained your qualification to practise, will have no opportunities of clinical study except such as your private practice may afford, and you will then find the value of the accurate knowledge of clinical facts which you have acquired by systematic case-taking. But case-taking is not only important in impressing on the mind the features of disease; it is also a most valuable training. It leads to clearness of thought, exactitude of language, and habits of regularity—all of the utmost value in reference to your future career as practitioners. By it you learn how to question a patient, what are the special points to insist on in making a diagnosis, and the most ready way of arriving at a correct opinion of the nature of a case. Three months' work as clinical clerk, three months of careful daily case-taking, are far more useful than as many years of desultory, irregular, uncertain attendance in the wards.

Let me add a few words in reference to the subject of diagnosis. It may seem to you an easy matter to make out the nature of a case. A man of experience will put a few leading questions, make perhaps only a slight physical examination, and at once pronounce a correct opinion of the existing ailment; and you may imagine that you will readily be able to do the same. But do not be mistaken. This power of rapid diagnosis has been the result of long observation and great painstaking; and you will find even that the man of the most matured judgment will often spend a long time over a case—will examine carefully all its details—before he will venture on an opinion of its nature. If you wish to attain to the power of accurate diagnosis—of rapid diagnosis in ordinary cases,—you must begin by examining with the greatest care every detail of a series of cases which are the best-marked instances of their kind. The study of these will prepare you to understand the varieties and complications which so constantly present themselves at the bedside.

In conclusion, I would therefore impress upon you the

importance—first, of a regular attendance in the wards, at the clinical lectures, and at post-mortem examinations; and, secondly, of careful case-taking. Bear in mind that when you have to undertake the management of cases on your own responsibility, you will have to watch and treat the symptoms which arise from day to day. Your attendance will not then be of an uncertain and irregular character; for if it be, your patients will soon dismiss you. As, then, you would wish to be able to estimate the daily progress of your future patients, watch carefully the daily progress of those whose treatment you witness here. Record their cases in your note-books, that they may become the more firmly impressed on your memory.

Clinical Lectures
ON
INFANTILE PARALYSIS AND ITS RESULTING DEFORMITIES.

BY RICHARD BARWELL, F.R.C.S.,
SURGEON TO CHARING-CROSS HOSPITAL.

LECTURE III.

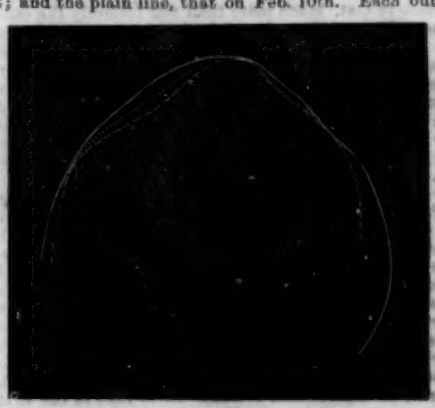
HOWEVER valuable it may be to learn that infantile paralysis is, in its early stages, an affection essentially curable by the two forms of galvanism, yet it must be acknowledged that cases very rarely come under proper treatment until this easier phase of curability has passed away. A better knowledge and insight into the natural history of the malady may cause it to be more generally attacked in time; but it is too much the prevalent habit to believe in a temporary paralysis on the one side, or simply in incurability on the other—to begin by buoying up delusive hopes, and then to foster a vague despair, and, while doing nothing material, to allow all the best hours of action to pass away.

With the lapse of time the limb loses power, not merely of movement, but also of circulation and nutrition; it becomes permanently cold and bluish in tint; it stops growing, and soon is shorter as well as thinner than the sound one. If the whole leg, for instance, be affected, it has a singular knack of outward rotation in standing, or in sitting of rolling outwards from the nurse's lap to such an extent that the inside of the thigh presents forward, and often the sole of the foot, the toes being pointed, is visible from the front.* In this stage, though certain muscles may retain some irritability, deformities are arising with great rapidity, and permanent lameness already has commenced to assert itself. Yet even now cure is quite possible, but will require longer persistence of treatment, and the peculiar use of strychnine, after the manner whose introduction to the profession I will shortly describe.

Being strongly convinced of the peripheral origin of infantile paralysis properly so called, yet finding that in cases of some little standing no progress was effected by galvanism, neither was the internal use of strychnine followed by any benefit, I determined to employ the drug locally. For this purpose I injected into the moveless muscles or their neighbourhood the Pharmacopœial solution of strychnia. Here, too, I was disappointed; the topical effects were nil, even while on the verge of constitutional symptoms. It appeared to me that I must retard absorption, and thus, while keeping the drug longer in the part to be influenced, avoid its action on nerve centres. I therefore procured a very dense solution—viz., two per cent.,—and began a series of cautious experiments. I used a syringe with a piston graduated into half-minims, over which runs a screw stop; each turn and a half of the screw corresponds to a half-minim, hence each such quantity can easily be divided into six parts, and, with more care, into twelve; as each half-minim of solution contains $\frac{1}{120}$ gr., subdivision is rendered easy and all precautions facile. In my experiments, however, I very soon discovered that, thus largely dissolved, strychnine might be safely injected in much larger quantities than had been imagined, and that I could fearlessly begin by giving even children five times the dose hitherto considered as the maximum—namely, five half-minims, or one-twentieth of a grain. But it was not alone with children that I thus worked: all local paralyses appeared to me proper subjects for these experiments. The results are singularly confirmatory of the idea which I had formed, that eccentric paralyses would be very amenable to the local action of strychnine. Thus, several cases of facial paralysis, several of paralysis of the wrist (independent of syphilis or of lead-poisoning), and others, have yielded to a few injections, after months of galvanism, internal administration of strychnine, and other remedies have failed. Several of these cases have been published;* here I will give only two short *résumés* in illustration of the power of the drug thus employed.

J. G. M——, aged thirty-eight, consulted me on the 14th January, 1872, on account of lameness from paralysis in both legs. In the early part of 1865 he had, at Malta, Mediterranean fever, which appears to be a variety of gastric fever. This was followed by acute rheumatism without heart affection. The recovery was slow, with many relapses. He does not know what muscles or limbs may have been paralysed when he was in bed; but when he began to get about, all the muscles in front of the tibiæ and all those in the ball of the thumb had lost power, except those inside the long flexor tendon, and even these were very much weakened. General wasting also of these muscles had taken place. His gait was very awkward and insecure; and he came to ask me about the desirability of instruments to assist him in walking, having found galvanism almost constantly employed utterly useless.

I explained the above-described use of strychnine, and proposed that it should at all events have a trial. He consented, and I began with the right leg, which was rather less wasted than the other. The dates and quantities of injection were as follows:—Jan. 14th, seven half-minims; 17th, eight; 19th, ten; 21st, twelve half-minims. From the time of the first injection the limb began to improve, both in power and in size. I then took the left leg—the more wasted of the two; but as the last injection had caused a slight sense of uneasiness I used a less quantity—namely, on Jan. 24th, eight half-minims; 26th, eight; 29th, eight; 31st, eight; Feb. 2nd, ten; 5th, ten half-minims. Here also improvement commenced with the first injection, as evidenced by the outlines here given. The broken line shows the condition on Jan. 24th; the dotted line, the condition on Jan. 31st; and the plain line, that on Feb. 10th. Each outline



was made by cutting out a piece of stiff card-board to fit on the limb 10½ above the inner malleolus so accurately as to leave nowhere any interval between its edge and the surface, yet nowhere to mark or impress the skin. The forms thus obtained were then accurately reduced to scale.

In equal degree with the restoration to shape did voluntary power return. The limbs are not yet as strong as normal members, but this is a mere matter of time.

M. E. B——, aged forty, came under my care on the 17th of October, 1872, with paralysis of the right side of the face. On the 31st of August she, in washing her face, put her

* This is the "jambe de Polichinelle" of French authors.

* Clinical Society's Reports, vol. ii.

finger twice into the right eye. To this she attributes the paralysis; it was doubtless a consequence. In the evening her husband saw the "mouth go round." She has been since the 1st of September under treatment, taking tonics and strychnia, and using galvanism.

Oct. 17th.—The right side of the face is perfectly immobile; the mouth much drawn to the left; the right eye wide open. I tested the irritability of the muscles with a rather sharp galvanic current. There was some action in the platysma, but nowhere else. I injected seven half-minims of the 2 per cent. solution of strychnia; no constitutional effects.

27th.—This patient remained away ten days, as she was afraid of what she called "the operation." To-day, however, I found improvement, which she said had immediately followed the injection, but had not continued after the first three days; hence she returned, and I injected eight half-minims. On Oct. 29th I injected ten half-minims, on Nov. 1st ten, on Nov. 3rd ten, on Nov. 5th twelve, and on Nov. 7th twelve.

I have noted here nothing beyond the mere injections, as steady improvement is the history of the case. After ten injections she was quite well, the mouth remained straight, and she could close the eyes perfectly. I saw her only a week or two ago, and she remained quite well.

It is to be observed that in this and in other cases of adult eccentric paralysis voluntary motion has been perfectly restored, while galvanic irritability has remained absent for a considerable time. In other cases a response to the continuous current has early arisen, but only after voluntary movement became markedly improved. The behaviour of infantile paralysis is herein different, and response to the electric current from one or the other apparatus precedes any return to voluntary movement; but this also comes after a little while. My method of proceeding with infants is as follows: To begin by galvanising each muscle separately, and to note the amount (if any) of electric irritability, or its entire absence. The former organs may almost take care of themselves, a little galvanism being passed through them occasionally. The others should be galvanised two or three times, and closely watched to detect any sign of twitching. Now during all this time it is most essential not to frighten the child, or give more pain than necessary. It is impossible to make much out about the paralysed muscles of a limb while the part is being jerked from above by violent movements of the trunk. Although we do not expect electric mobility to come into the muscles which have long been paralysed, it is well thoroughly to test them. And now, having determined to use strychnia, I begin with from three to six half-minims, according to my patient's age; and, selecting an opponent to that muscle which is most contracted, I inject the solution into its substance, or sometimes over the place of entry of its nerve. I continue such injections two or three times a week for a certain period, and then try the muscles again. They nearly always respond first to the constant current, and usually soon after this a small amount of voluntary power becomes perceptible. The injections must not be discontinued as soon as the galvanic or nerve irritability is established; brisk response to the former should at least be secured.

L. C——, aged six years and six months, was paralysed in the left leg sixteen months ago, there having been neither previously nor afterwards any severe illness. For the first ten months nothing was done except tonics and occasional rubbing. During the last six months galvanism and the internal use of strychnia have both been extensively used; indeed, on one occasion the drug was pushed so far as to produce tetanic spasms.

She came to me on the 6th of June, 1870. The left leg was shrivelled and utterly useless. When she was supported by her nurse on the sound leg, the other hung impotently down. By a peculiar jerk of the body, common to all these children, she could make it swing; and the psoas being intact, or nearly so, enabled her to hitch it a little forward. The limb was always cold—blue in places, pink in others. The muscles were so wasted that the limb looked barely thicker than the bone should be. There was no response to even strong galvanic currents. Three minims of strychnine solution were injected.

I injected this child with strychnia twice a week for three months before I got any response to galvanism. When the response began I left off the injections and the irritability decreased markedly. I then, in October, recommenced the use of strychnia, combining it with galvanism, and this treatment was continued for five months. In March, 1871, I discontinued the injection. Considerable voluntary irritability of muscles had now been established, and very easy response to the continued current. In May, the induced current began to tell. The rest of the case is a mere question of time. The patient is still improving rapidly.

J. R——, aged seven years and three months, was brought to me on February 3rd, 1871, with a deformity of the right foot, which I have named *pes cavus*, arising, as I have shown, from paralysis of the gastrocnemius, and frequently also of the muscles in front of the tibia. These paralyses were present in this case. The leg was a good deal wasted, but not livid. It easily lost temperature on cold days, but if kept well covered remained warm. The paralysis came on when she was two years old without illness of any sort; the deformity formed itself gradually. She has been treated, among other methods, with galvanism and internal doses of strychnine.

I injected five half-minims to begin with, and twice a week I continued this method, increasing to eight half-minims. At the end of seven weeks the muscles became amenable to the continued current. The use of galvanism was combined with the injection. At that time—viz., three lunar months—the muscles were voluntarily mobile, and the size of the leg was very much increased. The child walked very fairly well. The deformity was treated in a manner to be described in the sequel.

These two cases mark strongly a difference to be found in paralysed limbs—a difference which is of the very greatest value for prognostic purposes. In the one the extreme wasting and the great loss of temperature marked almost the utmost limit of nutritive disorder; in the other, although paralysis had lasted as long, or even longer, and though the limb was greatly wasted, yet the skin was not so cold nor so livid; the muscles gave, when pinched, some idea of resiliency, and were not like either soft paste in a sausage skin, or like bundles of cord, as in the former case. Now in these less livid cases, as it is certain that muscular degeneration has not gone so far, the chances of recovery within a moderate time are very considerable, however long the malady may have lasted. Of the other class I would speak with all caution. I have met with other cases besides that of L. C—— just quoted, which leads me to believe them curable, if sufficient care be employed for a long period. But we have to do not merely with malady. Three other conditions may, and do, often interfere—viz., convenience, patience, and money—to one or the other, sometimes to all of these, the best devised therapeutics will be forced to yield.

NOTES OF VISITS TO FOREIGN BATHS.

By JOHN MACPHERSON, M.A., M.D.

VI.—MUD BATHS, PINE FORESTS, AND PINE BATHS.

MUD BATHS were at one time used at Weilbach, but I believe are no longer so. I ought, perhaps, sooner to have said something of this variety of baths, as they are in use at several of the baths I have mentioned, such as Driburg, Meinberg, Eilsen, Nenndorf, Pyrmont, and Spa.

The use of mud baths in Germany was unknown till the commencement of the present century, and it is only in the last twenty-five years that it has become so popular. The practice, however, is an ancient one, not unknown to the Romans, who employed the slime deposited from baths and from mineral waters.

It seems to be by no means improbable that the uses and advantages of this sort of bath may have first suggested themselves to some one who had witnessed the immersion of buffaloes in mud, and observed the gratification they appear, in common with pigs, to derive from it.

The varieties of mud baths may be considered to be:—

1. When the mud or slime deposited from mineral waters is used for poultices or complete immersion; this is the oldest form, as at Acqui or at St. Amand.

2. Simple peat-earth, or other earth.

3. Peat-earth impregnated with mineral water, of which Franzensbad offers a good type.

In all cases the earth is carefully sifted, so that large particles may be got rid of, and is usually exposed to the frost of the previous winter. The homogeneous mass formed of the mixture of this earth with water, or mineral water, contains insoluble salts, carbonates and sulphates of lime and of magnesia, fine sand, in some instances a little oxide or sulphate of iron, vegetable matters with some tannin, humine and humic acid, occasionally acetic or formic acids, and sometimes a large quantity of infusoria; it usually gives off a good deal of carbonic acid gas.

The capacity of this mixture for caloric is less than that of water; the patient can, therefore, bear a greater degree of heat in it. The baths are usually of a temperature of 97° to 117° up to 124°.

As to their physiological action on the system, these baths are generally a strong stimulant to the skin, and they seem to be so, partly from their heat, and partly from the increased pressure, and even a certain amount of friction, which act mechanically. No portion of the earthy part is absorbed, but there must be absorption of gas, chiefly of carbonic acid, both by the skin and the lungs. The use of these baths, as might be expected, may, when protracted, produce swimming in the head and singing in the ears; when long continued it often brings out rashes, is believed to waken up old inflammations, and sometimes induces a feeling of weariness and distaste for food.

Although the theory of the physiological or of the therapeutic action of mud baths is very imperfectly understood, yet there is no question that they are often extremely useful in general torpor and atony of the system, in old thickenings and affections of the joints, also in anæsthesias, paralyses, and neuralgias. Kisch bears testimony to their great efficacy also in enlarged liver, still more in enlarged spleen, and in chronic affections of the uterus and its appendages, especially when supported by the internal use of the Marienbad waters.

Simple peat-water baths are used in some institutions abroad, as on the Untersberg Moor, near Saltzburg; but of their special efficacy there are no satisfactory accounts, nor am I inclined to believe in them. They might be had *ad infinitum* in Britain.

I shall pass by sand baths, although they were employed by the ancients, especially in dropsy, and though their use has been revived by the Germans in some towns and many seaside places. Among these last may be mentioned the little island of Norderny, on the coast of Hanover, a visit to which affords, from the novelty of the sea, such intense delight to Germans from the interior.

I cannot help remarking, in passing, that if we were bath-loving people, like the Germans, we have every opportunity of having our sand or turf baths; we have all the advantages the Germans have for them, and I do not see why they should not be started by some enterprising individual or company, especially as it would be easy to select a place, which could also supply the products of the pine for another class of baths, now very popular, of which I shall presently speak. I see no reason why these artificial baths should not be supplied just as efficiently at home as abroad.

I paid Baden Baden a visit of some days. If Ems be the pearl, Baden is undoubtedly the queen of German watering-places. Although it is a resort for pleasure at least as much as for health (of its 40,000 annual visitors about one-tenth use its waters), its unrivalled situation and natural beauties, and its immense supply of warm water, must always recommend it. Although the amount of solid constituents present in the waters is small (and they have only 16·5 grs. of common salt in them), yet, if one were even to view the waters as indifferent ones, their temperature, varying from 115° F. to 154°, must always make them applicable in a great variety of cases, especially in the more chronic forms of gout and rheumatism, and in the affections of declining years, which hot waters suit so much better than cold ones. But I shall not say much of a place so well known as this. All the establishments of the place, including the Trinkhalle, one of the newest, are on a magnificent scale; and to make up for the prospect of the tables closing with this season, the municipality is erecting large vapour and swimming baths. The specialty of Baden for gout is to be found in the Murquelle, which, in its 24 grs. of solid constituents, contains 15·5 of common salt and 2·3 grs. of chloride of lithium. Although I observe that some late writers think lithium efficacious in smaller doses than is usually supposed, yet the Murquelle is a very bulky way of giving lithium, containing as its waters do only 2·3 grs. of it in the 16 oz. To make it a little stronger, it is usual to add an equal quantity of carbonate of lithia to the chloride, and then by the addition of carbonic acid convert all the salts into carbonates. The winter climate of Baden is, on the whole, mild for an inland continental one.

In the favourite Murg valley, at a short distance from Baden, lies Gernsbach, which, although it possesses no mineral springs, has risen into popularity of late owing to its extract-of-pine baths and inhalation rooms, and its surrounding pine forests. Rothenfels, too, in the neighbourhood, has an acidulous salt spring.

Before entering further into the Black Forest, it may be convenient to make a few remarks on pine woods.

Although some forests are regarded as sources of malaria, and oak trees and hazel bushes have been counted insalubrious in Europe, like the tamarind tree in the East, yet the air of pine forests appears always to be grateful to the lungs, and has been considered wholesome, although of its absolute curative influence there is little evidence, and, indeed, it must be difficult to procure such. The idea of pine forests exercising a balmy influence on the lungs is a very ancient one. Pliny considered that the air of pine forests was more useful in phthisis and in convalescence from acute diseases than the voyage to Egypt, recommended in such cases in those days. Both Bournemouth and Arcachon at the present day owe a good deal of their reputation to their pine woods. The air of the latter is said to be distinctly sedative. On the whole, then, the air of the pine woods of the Black Forest may be regarded as an element entering into the consideration of the value of its baths.

But besides merely inhaling the air of its forests, people have of late years made much use of the products of pine in baths, vapour baths, and inhalations. Even this is not entirely modern; for the ancients recommended chiefly the internal use of decoctions of strobili and of pine tops, and thought pine nuts very useful in diseases of the chest; and at a more modern time, besides the internal use of drinks made from the spruce and the tar-water so long in vogue, we had inhalations of tar and of various resins.

The ancients did, indeed, recommend in gout baths of water in which cedar wood had been boiled, but the use of the pine-extract bath is quite modern. It has spread rapidly, and is now in use at many of the places I have already mentioned; for instance, at Gleisweiler, Rehburg, Liebenstein, Ruhla, and Eisenach. These aromatic extracts are procured from various pines—as from the Abies excelsa or Norway spruce, Pinus vulgaris or silver fir, Pinus sylvestris or Scotch fir, Pinus maritima or Bordeaux pine, the Weymouth pine, also from the common larch, and the most fragrant of all, from P. pumilio, the mountain pine. The baths vary considerably in strength and in odour, according to the way in which they are prepared.

The commonest way of making the bath is by adding to common water a certain quantity of the decoction got by passing steam through the young pine-tops.

I found a bath at the temperature of 84° very pleasant, and the smell grateful. It was scarcely stimulating to the skin, but felt warmer than water at the same temperature would have done. The heat of the bath and the quantity of resinous matter may be increased at pleasure.

I did not try a vapour bath, but it is said to be more stimulating and exciting, and it requires to be used with some discretion. In it the vapour is of course applied to the skin, and a portion of it is also inhaled.

But we may not only inhale air naturally loaded with the aroma of pines. There are various processes—for instance, of pulverisation of water—by which the air is impregnated. The balsam of the mountain pine, as prepared at Reicherhall, is said to be the most agreeable of all, and it is sufficient for purposes of inhalation to steep a piece of paper in it and hang it up in the room. It is a generator of ozone.

These inhalations are said to be useful in catarrhs and phthisis; but the baths, whether of water or of vapour, are much more powerful agents, and there seems to be little question that they are of great use in muscular rheumatism, (especially the vapour baths,) in certain anæmic conditions, and in spinal irritation.

One other product of the forests I must mention. In

some places patients are packed up in leaves of the birch tree. This produces profuse perspiration, and is said to be found useful in rheumatism and even in some dropsies.

I have already said, Why are mud baths not used in England? I may now add, Why are not pine baths? Why should we not have them at Bournemouth, Sunninghill, or Weybridge, and many other places in England? In Scotland, Dunkeld, Ballater, and Crieff are particularly suited for them. Wales and Ireland offer various suitable localities. And in some instances, as at Ballater, you might not only have mud baths, but baths saturated with chalybeate waters—not that I individually attach much importance to the latter addition; and where are birch leaves to be got better than on Dee-side for those who have a fancy for such a mode of packing?

AN IMPROVED PERIMETER.

(FOR MEASURING THE FIELD OF VISION.)

BY ROBERT BRUDENELL CARTER, F.R.C.S.,

OPHTHALMIC SURGEON TO ST. GEORGE'S HOSPITAL, AND SURGEON TO THE ROYAL LONDON OPHTHALMIC HOSPITAL.

IN many of the diseases of the eye that superficially appear to be chiefly local in their character, and in numerous cases also in which defects of sight are manifestly due to the reaction of central nerve lesion, the power to measure the field of vision with accuracy and readiness is of the greatest importance to the practitioner. In some instances the extent and shape of the field will at once determine a diagnosis that must otherwise have remained doubtful for an uncertain period; and in many the same data will afford the only trustworthy evidence with regard to improvement or retrogression. On these grounds the practice of perimetry has long been cultivated by ophthalmologists, and has lately been recognised as essential by physicians engaged in the study and treatment of diseases of the nervous system.

The early attempts at measuring the field of vision were of a rude and primitive character. A small white cross was marked on the centre of a black board, which was hung against a wall. The patient was placed with the eye under examination level with this cross, and at a measured distance of from eight to twelve inches away from it. He was directed to look steadily at the centre of the cross, which was called the "fixing point," and the other eye was closed or covered. The operator, armed with a black wand having a white tip, and with a piece of chalk, stood behind or at the side of the patient, and drew the white tip of the wand slowly along the board, from its margin towards its centre, in successive directions, usually first in a vertical line, next in a horizontal, and then in two lines intermediate between the former ones. The patient was directed to speak as soon as the white tip came into view, and at this point a chalk dot was made on the board. The patient was directed to speak again as soon as the white tip, in its onward movement towards the fixing point, became *distinctly* visible, and here a second dot was made. When the examination was completed there were two chalk dots on each meridian of movement. A line uniting all the external dots would show the absolute boundaries of the field of visual perception, and a line uniting the internal dots would show the boundaries of the field of distinct vision.

The maps afforded by this process were of great value, especially in the earlier studies of glaucoma and of nerve atrophy; but the process was open to the objection that the eye of the patient, which was concealed from the view of the operator, was apt to wander from the fixing point towards the moving object, and thus to vitiate the whole result. To meet this difficulty, Professor Donders made a hole in the centre of the board, and placed it in a vertical frame adapted to stand upon a table. The patient was directed to look through the hole at the eye of a second person suitably placed upon the other side of the board; and this second person gave notice if the eye under observation wandered. It is manifest that a certain amount of care and accuracy would be required from the second observer, and that the method, however occasionally useful, would render perimetry dependent upon the presence of at least a moderately skilled assistant. The flat board system, moreover, is open to the objection that the central fixing point is nearer the eye than any lateral portion of the surface.

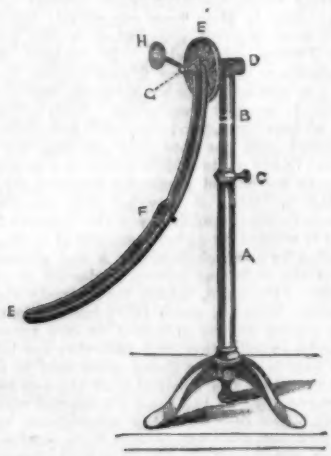
To obviate these inconveniences several contrivances have from time to time been suggested; but that which has found most general acceptance is the perimeter of Professor Förster, of Breslau. It consists of a strong wooden platform, measuring fifteen inches by nineteen, supporting at one end a double chin-rest, and having at the other a stout, upright iron pillar. This pillar carries a semicircular iron band, two inches wide and of twelve inches radius, placed with its concavity towards the chin-rest, and turning freely at its middle point on a horizontal axis, so that it can be placed vertically, horizontally, or in any intermediate position. A movable slide carrying a white spot, travels freely to and fro over the concave face of the band, and is worked by an arrangement of cords and pulleys set in motion by a winch-handle. A rod proceeding from the base of the chin-rest carries a slender stem which is placed close to the band, which turns freely right or left, and on which slides a small ivory ball. The chin of the patient is placed on the chin-rest, on the proper side for the eye under examination, and (the other eye being closed) the ivory ball is used as a fixing-point, and is adjusted at such a distance on the nasal side of the eye examined as to make the middle of the band correspond with the blind spot. The same fixation being maintained, the band is placed in successive meridians, and the appearance and disappearance of the moving spot as it travels round the arc are recorded on a diagram prepared for the purpose. The operator stands behind the arc, opposite to the patient, and is thus able to watch the direction of the eye, and to see that it does not deviate from the fixing-point. The face of the arc is divided into degrees, and its axis carries a circle similarly divided, so that a map of great accuracy can in this way be obtained. The eccentric fixation-point has the advantage of rendering the optic disc, instead of the macula lutea, the centre of the map, which thus corresponds to the ordinary course of ophthalmoscopic examination.

The principle of Professor Förster's instrument is perfectly sound; but its details are excessively faulty. It is very large, heavy, cumbrous, and costly; its strings are constantly becoming loose, or twisted, or otherwise out of gear; its chin-rest is too low, the instrument being on a table, for the comfort of the great majority of patients; and the superfluous half of its semicircular band is perpetually getting in the way. Like other people, I had borne these inconveniences with more or less grumbling, until Mr. Hawksley, of Blenheim-street, one day called upon me, wishing to examine the instrument on the part of a gentleman who desired to have one. I pointed out the faults to which I have referred, and made some suggestions for overcoming them; and the result has been the construction of the perimeter I am now about to describe.

It consists of a simple tripod, supporting a hollow stem (Fig. 1, A), in which a second stem (B) moves up and down, and can be fixed at any desired height by the screw (C). At the top of the stem (B) is a short horizontal axis (D), carrying the quadrant (E, E'), which turns in a complete circle, and moves with just stiffness enough to remain wherever it is placed. On the quadrant is a travelling slide (F), with a white spot; and a second independent axis is inserted in the axis of the quadrant at G, and carries a short tube, in which may be placed a stem to support the fixing point. The second or inner axis makes a complete revolution without affecting the position of the quadrant, and without being affected by it. At its attached extremity the quadrant terminates in a circular disc (E'), which is graduated into degrees at the back, and a fixed index allows the exact position of the quadrant to be read off. The quadrant is also graduated from ten degrees to ninety, on its concave face, so as to show the exact position of the slide. The fixing-point may be either an ivory knob at the end of a wire, or, what is for most purposes better, a small disc with a central perforation, as shown at H, *through* which the patient looks at an object on the other side of the room, and obtains fixation without exercise of the accommodation and consequent fatigue to the eye. The travelling slide (F) may be made

to carry a spot of any colour or size that is desired, and it is furnished with a ring at the back, by which it may be moved by means of a hook set in a handle, so that its position may not be indicated by that of the hand of the operator. For the purpose of taking exact measurements of the blind

FIG. 1.

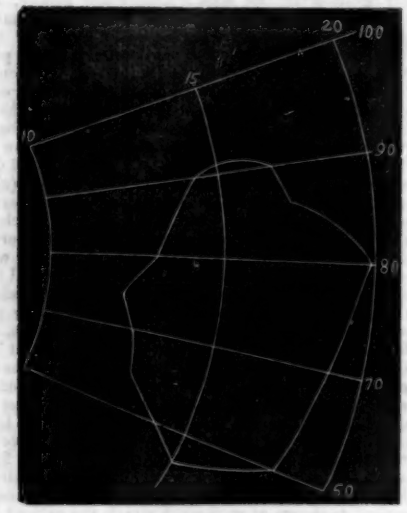


spot, the quadrant is graduated at the back from eight degrees to twenty-five, in degrees and sixths of a degree; and a white spot is placed on the centre of the axis (a), to serve as a fixing-point for this particular purpose.

In order to use the instrument, the patient is comfortably seated in front of a table, with his chin supported by the rest of a demonstrating ophthalmoscope. The perimeter is then set at such a height as to have the centre of its axis on a level with his eyes, and is placed with this centre exactly in front of the eye to be examined (i. e., an inch and a quarter to the right or left of the median line, according to the eye), and exactly twelve inches distant from it. The patient closes the eye not under examination, and covers it with the hand, resting his elbow upon the table for the sake of greater steadiness.

In order to measure the blind spot, the smallest white object is fixed to the slide, and the quadrant raised until

FIG. 2.



it is nearly horizontal on the temporal side of the eye under examination. The patient is directed to fix the central point, and the slide is moved from outwards towards the centre, until its white spot disappears, which it will usually do at about 17°. Continuing the same movement, it reappears, say at about 14°; thus giving the horizontal width of the blind spot in that meridian. Placing the white spot half-way between the two points, at 15½°, the vertical measurement may be taken by raising and lowering the quadrant until the spot reappears in each direction, usually at the meridians of 90° and 58°. The horizontal and vertical measurements may thus be taken in as many meridians as we desire; and an exact outline of the part of the field corresponding to the blind spot may be traced upon a chart. I have designed the foregoing chart (Fig. 2) for this purpose, and have traced upon it the gap in the field of my own right eye for an illustration.

In order to measure the field, the perforated disc must be used for fixation, and must be set so that when the patient looks through the hole at a distant point the centre of the axis corresponds to the centre of the blind spot. For this purpose, in a normal eye, the centre of the perforation should be 10° above the horizontal meridian and 17½° from the axis on the nasal side of the eye under examination. The patient is then instructed to look through the hole, the instrument being placed as before, and the eye not under examination closed. The operator moves the slide from without inwards along successive meridians until he has completed the circle, and marks the limits of perception and clear vision on a chart as he proceeds. The following diagram presents two continuous line *circles*, as data, the

FIG. 3.

outer having a radius of 70°, the inner a radius of 10°. The outer dotted line shows the limits of visual perception of my own right eye. The continuous line within the inner circle shows the limits within which I can read an unknown letter of Snellen's No. 8 test types; and the inner dotted line, which shows the entire field of vision of a patient with pigmentary retinitis, may serve to illustrate some of the clinical uses of the perimeter. The last two outlines are drawn from the fixing point as a centre.

In mapping the field one may of course proceed in any order; but there are some advantages in a regular method. I usually commence from zero, with the quadrant vertically downwards, and move it upwards towards the temporal side of the eye under examination. We may of course take a chart of the field by placing our marks on meridians corresponding to the positions of the quadrant (e. g., below the centre when the quadrant is downwards); or a chart of the percipient portion of the retina by placing the marks in contrary positions (e. g., above the centre when the quadrant is downwards). To render the charts universally intelligible the same plan should be adopted by all observers. Of the two named, the former is clearly the best: first, because it is the more simple; secondly, because the chart

so drawn will correspond with the more commonly employed inverted ophthalmoscopic image.

Since the woodcut has been taken I have had two small additions made to the instrument. The first is a little box beneath the tripod, which holds spots of various sizes and colours for the slide; and also a white knob on a stem, to be substituted for the perforated disc when it is desired to measure in the meridian of the fixing point, and hence to place the quadrant behind the perforation. The second is a screw on the axis D, by which the quadrant can be fixed or rendered easily movable at pleasure. By slackening the screw the quadrant can be turned to another meridian, without risk of displacing the general position of the instrument.

Wimpole-street, June, 1872.

A CASE OF PARAPLEGIA LASTING FIVE YEARS; ELECTRICAL ANÆSTHESIA.

QUESTION OF MALINGERING.

BY W. MOXON, M.D.,
ASSISTANT-PHYSICIAN TO GUY'S HOSPITAL.

A LAD aged eighteen was admitted into Guy's Hospital (Astley Cooper ward), under my care. He had been sent up from Northampton with the following history: He had fallen from a hay-loft nearly six years before admission, and in consequence of the fall was laid up with weakness of his lower extremities and of his back; he said that his water had been drawn off on account of his inability to pass it. The history which the lad gave was tolerably consistent. He said he had fallen from a height upon his back, and that paralysis of the bladder and lower extremities was the result of the fall, all of which was very likely.

Whenever a paralytic case comes under care one gets an advantage by inducing the person to put out all the effort he possibly can, urging and compelling him to do so. In this way one learns much of the nature of the case by the degree of willingness with which effort is put out, the freedom of the effort in the parts actually moved, as well as, of course, by the kind and degree of the imperfection in the usefulness of the paralysed part.

On making the boy get out of bed, he flopped on the floor, propping himself on his arms and resting on the side of his buttock, with his legs flexed at all the joints so as to be drawn up rather tightly. The legs were remarkably blue and cold, especially below the knees. The suspicious points about the lad's case were—first, the total paralysis he claimed to have; and, second, the defined line around his knees at and below which he declared the sensation to be lost. Under chloroform it was found that his legs, which he said had hurt him to straighten, would stretch to their length quite naturally; and when cautioned to be very careful, at the same time that he was forced to get upright—being held up in the air, in fact, by the arms,—his legs made very promising movements.

Testing the exact line limiting his anæsthesia in the way we employed led to still more doubt. We marked the professed line with ink, then made him shut his eyes, and tried his sensibility to touch above and below it. With his eyes shut he could not keep to his line as he had done most accurately when he was looking at it. It was remarkable, though, how near he kept to it.

The most interesting results were obtained from the electrical excitation of the paralysed parts. The lad was a miserable coward, and got into insufferable terror at the approach of the electrical battery. We did not calm his fears, but gave substance to them by applying the interrupted current so strong that I could scarcely bear it myself, which I endeavoured to do for the sake of appearances. He fairly bellowed when the poles were applied to his arm, the stimulated muscles of which contracted very actively, but I was much surprised to find that when this strong current was applied to his legs below the knees, he gave not the slightest sign of feeling it, and said that he scarce felt it at all, while the muscles contracted so feebly that their reaction was often doubtful, and never more than very trifling. The same current applied in the same way to the legs of a man in the next bed, a courageous fellow who willingly underwent the experiment, made him hiss inwards through his teeth, and no effort of will on his part could prevent the muscles from strongly contracting, though he made a very energetic face in the endeavour to resist contraction, whereas the boy's countenance was perfectly placid while the electricity was applied to his legs. The boy had been a fortnight in the hospital before I made this examination by electricity, and had already made considerable progress; first he had stood up holding on to the back of a chair, then pushed the chair before him, and at last lifted the heavy chair, supporting it instead of having it to support him. As all this mending had occurred in a fortnight, and especially as I could not but think that the power required to lift a heavy chair, in the awkward stooping posture the boy always assumed, was far greater than compatible with his claim to be paralysed, I had come to regard him as a shammer. These results of electrical examination, however, made me at the time doubt whether it could be all sham, and led me to expect that perhaps a check in the progress of the case might be anticipated. I therefore adopted a more active treatment than that hitherto used, which had consisted of camphor-water and driving behind the chair. The fresh means consisted in the use of silver, administered, not internally, but in the form of sixpences, and accompanied with promises of more. Under all these therapeutical means his progress was wonderful. He left go the chair-back and got about on a broom-handle, then learnt to carry the broom. Five weeks after Christmas he ran a very good race with another boy in the hospital-park and won the shilling. He is now apprenticed to a tailor in the city of London, and described by his friends as doing well.

This issue of the case I suppose will be taken to show the boy's condition throughout was no other than deliberate deception. I can't help holding that opinion. Under these circumstances the state described in regard of electricity becomes of great interest.

Can we suppose that the prolonged disuse of the limbs had so brought down the sensitiveness of his legs and weakened their muscles that the usual painful contraction was partly not set up and partly not felt. It is difficult to suppose this, seeing that the power of the will found its ways into his legs so soon and thoroughly as the story shows. Nevertheless, I cannot suggest any more likely explanation of the difficulty, and we must remember that although recovery was quick it was gradual. I should, however, have said that in the latter few weeks the electrical current was used to the boy's legs; but the recovery was by that time complete. I ordered the electricity only for its moral effect; yet some may be disposed to think that that helped the cure.

But as my belief is that the lad was malingering, I think the chief interest of his case lies in its showing that want of absence of reaction to the electrical current does not prove a paralysis to be real; while the whole history shows the power over such cases which one may exercise by firm and persevering pressure upon the patient's will, keeping up a sufficient friendliness in the meantime.

Finsbury-circus, June, 1872.

ON THE QUALITY OF ATMOSPHERIC AIR IN PUBLIC AND PRIVATE BUILDINGS IN LEICESTER.

BY RICHARD WEAVER, C.E., F.C.S.

No. I.

REPEATED observation in many localities has established the fact that average normal air, in positions free from pollution by the works of man, contains 0·399 part of carbonic acid in every 1000 parts of atmospheric air. Hence this gas, being the chief product of combustion in both the animal economy and manufactures, may be conveniently taken as a measure of aerial contamination; and its determination in different places shows their relative purity of breathing air.

The analyses given in the accompanying tables were undertaken during the past winter months, and test the condition of the air of manufactories representing the staple trades, and of places of public resort, schools, and private dwellings, in the busy town of Leicester; also the cubical space per individual, the number of persons present and of gas-jets burning at the time of observation, with the internal and external temperatures, and the provision for the ventilation of rooms.

The examples Nos. 1 to 6 are small establishments, where, as a rule, the proprietors work with the *employés*, generally in rooms with low ceilings and without any provision for ventilation. The aerial contamination in all the shops was considerable, and in some of them very excessive. It was noted that breathing in several of the rooms was rendered oppressive, and in every case a pleasurable sense of relief was experienced on entering the outer air. No. 10 shows that after a few hours' occupation considerable cubical capacity in a workshop is of no avail in the absence of ventilation. Again, Nos. 8 and 11 prove that an open window or door wonderfully ameliorates the condition of the breathing air, even with diminished space. The small ventilators in the class-rooms of a national school (Nos. 13 to 15) are quite inadequate to secure fresh air to the scholars, and their area is very insignificant compared with the total capacity of the rooms, and out of all proportion. In the same school, No. 14 points out that a few jets of gas double the air-pollution.

Condition of Atmospheric Air of Public and Private Buildings in Leicester.

NATURE OF BUILDING.	Number of persons present.	Space for each person in cubic feet.	Temp. of outer air in F. degrees.	Temp. of building in F. degrees.	Carbonic acid per 1000 of air.	Number of gas-lights burning.	REMARKS ON VENTILATION.
1. Boot and shoe finisher	6	51	42	78	5·28	3	No ventilation but fireplace.
2. Framework knitter	14	186	42½	65	5·32	14	Ditto ditto
3. Ditto ditto	10	321	46	65	4·08	8	Ditto ditto
4. Boot and shoe finisher	7	197	44	73	4·60	4	Ditto ditto
5. Needlemaker	6	800	44	60	2·87	6	Ditto ditto
6. Tailor's workshop	20	367	43	67	3·06	13	Ditto ditto
7. Boot and shoe finisher	12	191	46	66	2·59	8	Ventilated through window.
8. Tailor's workshop	25	280	46	70	2·17	25	Ditto ditto
9. Elastic web manufacturer	20	—	44	60	2·11	30	Ditto ditto
10. Fancy hosier	9	483	44	63	4·93	10	No ventilation.
11. Boot and shoe riveter	13	233	46	56	1·72	9	Ventilated by door being open.
12. Riveting-room of boot manufacturer	18	205	46	69	3·28	10	Ventilators closed.
13. National school: Science class-room	17	200	46	60	2·41	6	Small ventilator in ceiling.
14. Ditto Boys' day-room	100	236	47	55	1·16	—	Ventilators in roof.
15. Ditto Girls' day-room	110	116	47	58	1·64	—	Small ventilators in side of wall.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

THE ACTION OF SULPHATE OF QUININE UPON THE TEMPERATURE IN PULMONARY PHTHISIS.

(Under the care of Dr. OGLE.)

THE following observations regarding the action of quinine upon the temperature of the body in pulmonary phthisis were recently made by Dr. Ogle. The patient, a young woman, was admitted into the hospital with symptoms of dyspepsia, attended by pain across the back, great debility, and mental despondency. At this time no febrile condition existed. Subsequently, whilst taking quinine and sulphuric acid, pains about the thorax came on, and also undoubted general and stethoscopic signs of deposit of tubercle. At this time the daily registering of the temperature of the body was undertaken. From April 27th to May 20th the temperature was 100° night and morning, except on three occasions, when it went up to 101°—once in the morning and twice in the evening, at intervals of three or four days.

During the above days—that is, from April 27th to May 20th—the patient was treated as follows: viz., by two-grain doses of quinine and a few drops of sulphuric acid in water every four hours, and by occasional turpentine stupes to the chest, until May 1st; she then took effervescing citrate of ammonia and carbonate of ammonia until the 6th of May; after which she returned to the quinine and acid, and took two drachms of cod-liver oil after dinner. This was continued (a blister having been applied beneath the left clavicle on the 18th) until the evening of the 20th, when she began to take ten-grain doses of quinine in a little dilute sulphuric acid and water three times a day. The temperature was then recorded as follows:—

	A.M.	P.M.		A.M.	P.M.
May 21st ...	100°	100°	May 23rd ...	99°	99°
22nd ...	99	99	24th ...	99	99

On the 24th the quinine was increased to fifteen-grain doses until the 27th, the temperature during this time being registered as follows:—

	A.M.	P.M.		A.M.	P.M.
May 25th ...	98°	99°	May 26th ...	99°	99°

At this time the quinine produced such discomfort and pains in the head, with buzzing in the ears and dimness of sight, that the dose was again diminished to ten grains, and continued till May 31st; and during this time the following temperatures were recorded:—

	A.M.	P.M.		A.M.	P.M.
May 27th,	100·4°	100·3°	May 30th ...	100°	100°
28th,	100·3	100·2	31st ...	100	—
29th,	100	100·2			

At this period, as the uncomfortable feelings about the head had not subsided, Dr. Ogle omitted the quinine for some days altogether; the temperature during this time remaining at 100°. On June 3rd, as all discomfort had abated, Dr. Ogle at once put the patient on twenty-grain doses of quinine night and morning, which doses were continued until June 10th; and the following temperatures were during that period recorded:—

	A.M.	P.M.		A.M.	P.M.
June 4th ...	—	99°	June 8th ...	100·2°	100°
5th ...	99°	99	9th ...	99	99
6th ...	99	99	10th ...	100	—
7th ...	100	99·2			

On the 10th the quinine was discontinued, and the patient

a few days after, at her own desire, left the hospital, and thus observation of her case was broken off.

With regard to diet, the patient, during the thermometrical observation, was taking meat and potatoes, or fish with eggs and (at her own request) without butter, until June 3rd, when she had fish and beef-tea, occasionally eggs, but no meat. For the most part, three ounces of port wine were given daily.

On consideration of the tables the following points are noticeable:—

1. The high temperature and its uniform range in a case of active phthisis, the temperature during observation prior to the exhibition of the large doses of quinine being never lower than 100° F., and occasionally 101°.

2. The promptitude with which (see date May 22nd), on the exhibition of the ten-grain doses of quinine, the temperature sank to 99°, this range being maintained night and morning.

3. The same degree of temperature only being attained when the quinine was increased from ten- to fifteen-grain doses, except on one occasion (the morning of May 25th), when it fell to 98°.

4. The return of the high range of temperature on the disuse of the quinine, and even of a higher degree, as on three occasions it reached respectively 100·2°, 100·3°, and 100·4°.

5. The subsequent reduction of temperature to 99° on the quinine being given in twenty-grain doses night and morning, with only one or two exceptions, when it attained 100° and a little more.

During these fluctuations no proportionate modifications of respiration, of the pulse, or of the heart's beat, were found to exist.

KING'S COLLEGE HOSPITAL.

DISEASE OF THE ANKLE-JOINT; PIROGOFF'S OPERATION; RECOVERY.

(Under the care of Mr. HENRY SMITH.)

THE notes of the following cases have been forwarded to us by Mr. H. R. O. Cross, dresser.

E. L——, aged four, was admitted into the Wigram ward, under Mr. Smith, on May 25th, for disease of the left ankle-joint. He has been an out-patient for some time, and both local and constitutional treatment has been employed, without arresting the advance of the disease. On examining the joint, sinuses were found on both sides communicating with the interior; the ankle was considerably swollen. Mr. Smith decided upon operative interference, and performed Pirogoff's operation on June 1st. The operation was done in the usual way. The bones of the leg were not found much diseased, and only a thin slice of the tibia was removed with the malleoli. The surface of the bone exposed was found quite healthy. The flaps were brought together without dividing the tendo Achillis; the leg was put upon a back splint, and the stump strapped and dressed with red wash. The result is an excellent stump, which has now quite healed; the parts are in good position, and the patient is in good health and has done remarkably well.

STONE IN THE BLADDER; LITHOTOMY.

H. K——, aged seven, was admitted on June 14th into Victoria ward, under Mr. Henry Smith, for stone in the bladder. About three years ago he was noticed constantly pulling at his prepuce; he soon after complained of great pain after micturition; the urine was cloudy, and there has been a copious discharge of mucus and lithates for some time. He was seen by a surgeon in the country, who said that he was suffering from stone, and sent him into hospital. Mr. Smith confirmed the diagnosis, and on Saturday, June 22nd, performed the lateral operation in the usual way. The stone was large, about 1¼ in. by 1 in. Mr. Smith first endeavoured to remove the stone with the scoop, but from the large size found it was impossible; he then easily extracted it with the forceps. Mr. Smith afterwards made a few remarks upon the operation of lithotomy in children, and dwelt especially upon the care and slowness of proceeding requisite in operating in such cases.

CENTRAL LONDON SICK ASYLUM.

CEREBRO-SPINAL ARACHNITIS, WITH CEREBRAL DISTURBANCE.

(Under the care of Dr. STRETCH DOWSE.)

A. G——, aged twenty-five, a woman of dissolute habits, was seized suddenly with general malaise, acute pain in the joints, accompanied with swelling and profuse perspiration. It appears that her health, previous to this attack, had always been excellent, but for two or three weeks before the commencement of this illness she had been compelled to submit to great privations and exposure to cold. She was admitted into the Highgate Infirmary on the 26th February, and died on the 31st day of March, 1872.

Upon admission her face was bloated; almost every joint was slightly swollen and very painful. She was extremely weak, and could not move without assistance. There was intense pain at the back of the head, extending down the spine to about the second dorsal vertebra, and for three or four days she was constantly vomiting; neither solids nor fluids were retained by the stomach; the bowels were obstinately confined, and both light and sound were intolerable to her. The skin was moist and the secretion had a sour smell and acid reaction. The pain of the head and spine was fixed, but that of the joints migratory and paroxysmal. In relation to the latter, it was always noticed that, independent of locality, after it had subsided or towards its subsidence, the skin became intensely red, and gradually, though in some instances rapidly, passed into a deep purple colour, and, as a rule, it disappeared as rapidly as it made its appearance. The intellect at this time was clear, the memory good, and the faculties perfect. The urine contained about one-third its volume of albumen (which subsequently disappeared), some renal epithelium and blood-cells. Temperature 101·8°, pulse 96, respiration 30 per minute. This state varied little for nearly three weeks, but towards the end of this period she became lethargic, and at times almost comatose.

On March 15th it was first observed that she had spasmodic twitchings of the facial muscles supplied by the portio dura. These were bilateral, and appeared to affect each half of the face, ultimately giving to the mouth most varied contortions; the scalp, occiput, and spine became intensely hyperæsthetic, and when the body was moved she cried out bitterly. There was no paralysis of either extremity; urine free from albumen; pulse 112; temperature 101·2°; respiration 26 per minute.

The following is the daily record of her condition from this up to the time of her death:—

18th.—Has passed a restless night; screams out violently with the pain at the back of the head when it is moved from the left side, where it is rigidly fixed; there is muttering delirium, general hyperæsthesia all over the body, and no control over the sphincters; both pupils are widely dilated, the right more so than the left; temperature 101·6°; pulse 112; respiration 27 per minute. There is a slightly convergent squint, both eyes being occasionally carried upwards and inwards.

19th.—Is quite comatose; breathes stertorously; temperature 100·2; pulse 127; respiration 32 per minute.

20th.—Is much better; consciousness has partially returned; mental faculties good; cries out bitterly when the head is moved.

21st.—Is perfectly conscious. Complains of pricking pain over the front and back of the head; lies upon her back almost motionless. When she moves the extremities the act is performed with marked slowness and precision, not indicating positive impairment of movement so much as a consciousness of the pain that an active or jerking effort always produces, and which is so remarkably characteristic of either an irritable or inflammatory state of the membranes of the cord. The pupils are widely dilated. There is no intolerance of light. When asked to protrude the tongue, she does so with marked slowness and difficulty, and complains of great pain about the mastoid cells and articulations of the jaw, so much as to interfere greatly with mastication, but the act of swallowing is unimpaired.

22nd.—Yesterday evening she became comatose, with stertorous breathing and floccitatio. This morning her condition is the same. The urine, instead of dribbling from

the bladder, is retained. There are clonic spasms affecting the whole body, but most markedly the lower extremities. Temperature 99·6°, pulse 124, respiration 33 per minute.

23rd.—Consciousness has again partially returned; lies in a state analogous to between sleeping and waking. When roused complains of intense pain at the back of the head and down the spine. There is marked hyperæsthesia of the right upper extremity, and on either side of the neck, taking the course of the trapezii muscles. Both pupils are widely dilated. There are prolonged rigid spasms of each extremity, but their tonicity is more marked on the right than the left half of the body. Urine still retained; contains only a trace of albumen; is highly ammoniacal, loaded with ammonio-magnesian phosphates, cystic mucus, and epithelium.

24th.—In much the same state as yesterday. Of the two she is more conscious and sensible to impressions made upon anal sphincter; asked for the bed-pan; complains of much less pain when moved. Temperature 99·4°, pulse 100, respiration 29 per minute.

25th.—Is quite conscious; talks rationally and coherently; the general cutaneous hyperæsthesia, and more particularly that of the right upper extremity, has passed off, leaving an hyperæsthetic state of the deep-seated muscles, which are acutely painful upon pressure. Tongue and skin moist; not a trace of albumen in the urine, which remains the same as on the 23rd. Temperature 98·2°, pulse 100, respiration 28 per minute.

26th.—Has passed a restless night; mental faculties completely disturbed; talks irrationally. It is impossible to get her thoughts definitely localised; they are no sooner generated from a given point than the chain of connexion is broken up, and a new centre is brought into play, which has neither connexion nor correlation with the former. She bears pressure upon the eyeball without flinching. Temperature 101·6°, pulse 130, respiration 35 per minute.

27th.—As yesterday.

28th.—Although in a lethargic, half-comatose condition, her mental state has decidedly improved, but in a given direction only. She is conscious of impressions conveyed by bodily contact to the sensorium, but is quite unable to appreciate their nature. Her memory is not absolutely defective, but the form of amnesia is associated with an aphasic connective, by which the words are misplaced.

29th.—To-day she has been suffering from a series of clonic convulsions; whilst lying passively upon her back with the eyelids partly closed, a sudden and momentary spasm shakes every muscle of the body, producing mental agitation and distress; it appears to arouse her to fleeting consciousness only to return to a comatose condition.

31st.—Temperature 99°; pulse 160; respiration 45 per minute, the latter hurried and irregular; mucous râles heard all over the chest; heart's action confused, the second sound partially obscured at base by a diastolic murmur; the face is covered with big drops of sweat; there is no rigidity or contraction of the extremities, which lie passively and powerlessly extended. About three hours before her death profound coma with deep stertor came on rather suddenly. The face and lips became cyanotic, and she expired, apparently from apnœa.

Autopsy, about twenty four hours after death.—When the calvaria was removed the dura mater presented a natural appearance, save that the vessels were engorged with black blood. It was removed with ease, and there was no adhesion to the arachnoid beneath it. The surface of the cerebral convolutions was of a dull though deep red colour when viewed superficially, but when more minutely examined the depth of colour was found to be due to the engorged condition of the minute ramifications of the capillary vessels of the pia mater, and the brain-substance was of a pinkish red tinge (only superficially). Upon exposing the base it revealed most beautifully the progressive work of inflammatory disease, extending from the optic commissure in front over the crura cerebri, pons Varolii, and medulla oblongata to the cord behind. The arachnoid membrane was completely changed in structure; instead of being translucent it was dull white and opaque, varying in thickness in different parts; in some places it appeared to be converted into fibrous tissue, and in others it consisted of soft fibro-corpuscular material. This change in the arachnoid was not confined entirely to the parts just mentioned, for over the whole surface of the cerebrum and cerebellum it presented a slight degree of opacity, which was not observable immediately the brain was removed from the skull; but after it became dry it was most distinct, more along the course of the veins and where the parietal surface bounded over from one to another convolution. The only place where the pia mater had undergone absolute change was in the velum interpositum. This vascular network was of a dark greyish-black colour, interspersed with patches of organised lymph. The third and fourth ventricles were full of fluid. The lateral contained scarcely any. The choroid plexuses were of their natural red colour.

HUDDERSFIELD INFIRMARY.

CANCEROUS GROWTH IN THE ANTERIOR MEDIASTINUM.

(Under the care of Mr. Clarke.)

The notes of the following case have been forwarded us by Mr. Wm. Robert Smith, house-surgeon:—

J. F——, a mason, aged thirty, was admitted into the Huddersfield Infirmary on March 8th, 1872, suffering from great dyspnœa, with difficulty of swallowing, and some pain in the chest, extending down the arms, particularly the right.

He stated that he had been quite well up to six weeks ago, when, after lifting a heavy piece of stone, he noticed a swelling in his neck, and at the same time he complained of pain of a dull aching character, which seemed to start from the upper part of his chest and spread down the right arm. From that time up to the present he has been gradually getting worse; his breathing becoming embarrassed, with partial loss of voice, and dysphagia increasing.

On examination the chest and arms, especially the right, were found very œdematous, and the superficial veins were much enlarged. There was, however, no swelling of the legs, nor were the veins in the lower part of the body enlarged. The tongue was slightly furred, but there was no derangement of the digestive organs. Pulse 80, equal on both sides. The left shoulder was lower than the right, and there was some flattening below the left clavicle. Movement of the whole left side was deficient. There was no bulging of the chest-walls in any place. The whole of the left side was dull on percussion; on the right side, absolute dulness from below the clavicle to the upper border of the fifth rib; the right back fairly resonant; the left dull. At the right apex tubular breathing was heard, and in the supraclavicular region a murmur, as if produced by pressure. On the left side the respiration was deficient.

In this case it was at once evident that the mediastinum was occupied by a tumour compressing the trachea and œsophagus, and also interfering with the circulation. But as to what the growth was there seemed great room for doubt; the absence of cardiac murmur, thrill, or pulsation being against the belief that aneurism existed, whilst the history of the patient (all his symptoms coming on after some great exertion) seemed to make it probable.

The patient got gradually worse, the breathing becoming more and more oppressed, the œdema and pain much increased, the voice nearly lost, and swallowing almost impossible. He died exhausted March 22nd.

At the post-mortem examination, on opening the thorax, a large solid mass of a carcinomatous nature was found extending over the whole of the upper part, being closely connected with the left lung, and adherent to the right pleura. The right lung was congested, and pleura adherent; left lung very much contracted, and firmly adherent to the chest walls and the cancerous growth. Pericardium not implicated; contained a large quantity of grumous serum. The heart healthy. The mediastinal glands were much enlarged. In the liver and pancreas were several masses of cancer. Kidneys and spleen healthy.

MAISON MUNICIPALE DE SANTÉ, PARIS.

(Cases under the care of M. Demarquay.)

In the course of a visit which we paid a few days ago to the surgical wards of the above hospital, M. Demarquay kindly showed us, or related the details of, various cases of interest.

A CASE OF COMPLETE SELF-MUTILATION.

This patient was brought into the wards as we were going round the hospital. He was a man about twenty-eight years of age. The whole of the external genital organs had been cut off two or three hours before by means of a razor, and the wound was as smooth and perfect as if made by the most skilful surgical hand. The man had lost a considerable amount of blood. He was in a condition of semi-delirium due to alcoholic intoxication. To the questions which were addressed to him he would every now and then make some clear, direct answer, but evidently his mind was quite confused through the effects of drunkenness and loss of blood. On being asked as to the cause of his self-mutilation, he made an allusion to some love troubles, but it was found out eventually that the man had been long addicted to drinking, that he had been intoxicated for the preceding three days, and had committed self-mutilation in a fit of alcoholic delirium. A strong dose of opium was administered, and, notwithstanding the considerable loss of blood, some hopes were entertained of saving the patient's life; but he died the following morning. The interest of the case lies in the fact that self-mutilation was complete, the penis and scrotum having been cut off quite clean.

M. Demarquay mentioned that in the course of his surgical practice he had seen several cases of partial self-mutilation, but never a complete one like this.

TWO CASES OF SOFT CHANCRE OF THE FINGERS, ACCOMPANIED WITH CHANCROUS BUBOES IN THE EPITROCHLEAR REGION.

The details of these cases were furnished by M. Demarquay, and his house surgeon, M. J. Tirard.

The first case was that of a man aged twenty-two. When first examined by Dr. Demarquay, the following lesions were noted:—On the index-finger of one hand a deep, irregular, depressed cicatrix; immediately above the epitrochlea of the same arm a tumour, about the size of a hen's egg, with a soft fluctuating centre and hard œdematous edges. The patient said that the cicatrix on the finger was the result of a whitlow; and then the question arose whether the swelling in the epitrochlea might not be a mere glandular swelling, the result of the whitlow. On viewing, however, the peculiarly depressed and irregular character of the digital cicatrix and the appearance of the finger, M. Demarquay asserted that it must be a chancre. The tumour was opened, and there issued an abundant flow of sanious, non-homogeneous, brownish matter. The patient was then minutely questioned, and related that, in the preceding month of September (this was in February) he had been suffering from soft chancre on the penis; that he used to dress the chancre with aromatic wine; that one day he burnt his finger, did not attend to the burn, and continued to dress the chancre in the same way. The wound resulting from the burn became larger and deeper; but there had never been any pain. It had healed only in January; and then the tumour in the arm first made its appearance. The incision made into the tumour by M. Demarquay was dressed with soft poultices occasionally and aromatic wine. The patient left the wards on March 12th, the wound being then almost entirely cicatrised.

The second case was very much like the preceding one. It had been under M. Demarquay's care two years ago. This patient was a youth who also had chancres on the penis. One day he burnt his finger with some sulphur, and then the same consequences occurred: large and deep sore on the finger, which took a long time to heal; a tumour in the epitrochlea with sanious pus and hardened edges, which resisted for a long time the employment of all therapeutical means.

There is no doubt, said M. Demarquay, that the epitrochleal swellings were true chancrous buboes, due to the absorption of a special kind of pus. Such cases are rare, M. Ricord, in the course of his long special practice, having only observed one similar instance. Buboes in the armpit, through chancres on the fingers, are of more frequent occurrence. In M. Ricord's case the pus taken from the bubo was inoculated with success. M. Ricord had looked up statistical accounts of chancre, and found that the occurrence of hard chancre of the fingers was more frequent than soft chancre. Both, however, were very rare, since out of Ricord's statistical index of 651 cases, only two belong to the fingers. The question naturally suggests itself whether soft chancres of the finger are not sometimes overlooked and mistaken for other lesions—whitlow for instance. In the preceding cases the existence of the epitrochleal bubo was a clue to the discovery of the true character of the digital lesion.

Reviews and Notices of Books.

Annals of Cholera: from the earliest periods to the year 1817. By JOHN MACPHERSON, M.D., Inspector-General of Hospitals, H.M. Bengal Army (Retired). 8vo, pp. 238. London: Ranken and Co.

THIS work is an important contribution to the literature of cholera. In it Dr. Macpherson adds much to our knowledge of the prevalence of cholera in India prior to the present century; and he enriches with further researches and brings into connected view the early records of so-called cholera and of choleraic disease in Europe. The most interesting and instructive conclusions at which Dr. Macpherson arrives from his researches as to cholera in the East are as follows:—

"Cholera was first observed by Europeans in India in 1503, and the first epidemic of it that has been described took place at Goa in 1543.....In the seventeenth century cholera was known at Sumatra, in Java, in Japan and China, in Arabia and Mauritania, at Goa and Surat, and on the shores of India generally, and it is tolerably certain that there were several epidemics in the interior of India..... In India it is certain that there was little cholera in the delta of the Cauvery in the beginning of the eighteenth century; that after the middle of the century there were very extended epidemics, and that towards the end of the century the disease had died out very much. Again it is certain that there was little cholera in Lower Bengal during the last half of the eighteenth, and very little in the commencement of the nineteenth, although it broke out with such virulence in the year 1817. Or out of India, whether it was introduced into Java or not, it was for a long period in the seventeenth century regarded as an endemic of that island, but ceased to be so in the eighteenth century. Again, as an epidemic, the disease visited the Mauritius in 1775, and died out. It visited Bengal in 1781, but was extinguished. It visited or broke out in Bengal in 1817, and has never ceased to exist there. We thus learn that a district nearly free from cholera may become its favourite seat, and then, after a longer or shorter period, cease to be so" (pp. 201, 203).

Of the place of origin of the epidemic of 1817, Dr. Macpherson states that there is not the slightest reason for connecting it, as is commonly done, with Jessore in particular, and still less with the Sunderbunds (p. 205).

The book itself must be referred to for the curious and interesting details which Dr. Macpherson gives of the early history of "cholera" in the West. Only by such reference can the learned labours of the author be rightly appreciated. It is unfortunate, however, that the work should be marred by suggested applications of the historical data which it contains to speculative purposes, for which they form a most unstable foundation. The author somewhat ostentatiously guards himself from countenancing too readily modern theories and theorists (pp. ix. 2), but he holds that the "history of the past should aid us in forming our opinions on such subjects as the following: How far any new causes favouring the origin or the spread of cholera came into operation about the year 1817; how far it is probable that all malignant cholera issues now solely from one corner of India; what chance there is of malignant cholera becoming endemic in Europe; how far in the case of malignant cholera the course of any one epidemic, as a whole, has been materially influenced by any measures meant to repress it; whether the laws and habits of cholera (which are only now beginning to be studied, with the aids

which systematic observation and of accurate statistics afford) have remained tolerably constant; wherein does the difference between ordinary and malignant cholera consist" (pp. 8, 9). This is a tolerably wide field for the exercise of an active ingenuity in the application of historical data, of which, so far as the West is concerned, a first, and certainly at present not to be determined, question arises as to the meaning of the term "cholera" among the older writers, and of which in respect to the East certain chronological facts only are as yet fairly available for argument. Is the "cholera" of the older writers a generic term, as "fever" was even among modern writers until within the past quarter of a century? or is "cholera" (a conclusion to which Dr. Macpherson would appear to come, see the Appendix to his work) a single disease having various phases? Each supposition is equally probable in our present state of knowledge, and each requires to be kept fully in view in analysing historical records of the disease; but the former is wellnigh lost sight of by Dr. Macpherson in the course of his work, and the word "cholera" is dealt with by him in commenting upon the different authors he quotes as if it had much the same signification at all times. At least, the possibility of the same word being applied to very different states of disease is by no means sufficiently kept in view.

The most able of our pathologists and physicians in the present day, with the diseases too frequently before them, hesitate to state, while admitting a difference, in what the difference between ordinary and malignant cholera consists. Dr. Macpherson thinks that the opinions of medical writers before the present century may aid us in solving the difficulty. After this, surely he ought to have a little more sympathy with the exercitations of modern theorists, however wild.

It would be curious to know what Dr. Macpherson's conception of a theory is. He tells us that "it is very unusual to find any writings on the subject of cholera, even official reports, in which the author does not show a very distinct bias for some one theory of etiology, pathology, or treatment; and, unfortunately, no theory that has been hitherto brought forward on any one of these points can be considered to have advanced further than the stage of being under probation." (p. 2). Dr. Macpherson does not appear to have a clear conception of the use and necessity of theory as a means of research. How can a theory cover more than known facts; or complicated facts such as those which relate to cholera be dealt with apart from theory? It is one thing to condemn ill-considered theories; another to depreciate theories indiscriminately.

Dr. Macpherson, indeed, seems to have a craze about cholera theories, but, fortunately, he supplies the explanation of its existence in the present work. In a foot-note (p. 167) he gives a summary, according to his own notions, of the present state of speculation as to the etiology of cholera. And, first, as to the commencement of the disease, he thinks that "we may conjecture it to be some morbid process originating within the system, or excited in it by bodies organic or inorganic, solid or gaseous, however generated, coming from without." This is much after the fashion of that admirable art of prescribing in which a multitude of drugs were compounded together, so that if some missed of the hoped-for effects, others might succeed. Dr. Macpherson places the theories of the propagation of cholera in five categories. 1. "*By contagion, direct or indirect.* To many minds," he says, "the explanation of the propagation of cholera by contagion alone is quite satisfactory." Not a word is said to indicate that the contagiousness here spoken of is held to differ in any respect from that of small-pox or scarlet fever. 2. "*By air.* The theory of cholera being an air-borne pestilence has always been a popular one in India," &c. 3. "*By water.* The school that believes in the propagation of cholera mainly by water polluted with its germs is essentially English." What does this mean? What English theory maintains that cholera may be propagated over a district of country, a province, a kingdom, by water? The proposition is simply nonsense, and altogether misses the conditions under which, according to English authorities on cholera, the propagation of cholera by water is probably the gravest form of propagation. 4. "*By soil.* Under this head come *all* the old popular notions of emanations from the soil, malaria, *drain and privy emanations, gases*, such as sulphuretted hydrogen and carbonic acid. Pettenkofer must be considered the great modern investigator of terrene miasms, &c." The confusion of existing knowledge, both practical and etiological, under this heading, by Dr. Macpherson, is inextricable. To class drain and privy emanations under the head of "soil," and to imply that the hypothetical conceptions of Pettenkofer represent the results of the accumulated observation and experience of English and foreign observers on the influence of drain and privy emanations upon the dissemination of cholera, is to misrepresent some of the most clearly defined results of observation. 5. "*Seasons and weather.*" "It appears to me," writes Dr. Macpherson," "that *all* writers on etiology insist too much on some one of the foregoing modes of propagation." It would thus seem that Dr. Macpherson holds of no account, or is unacquainted with, the most recent English teachings as to the etiology of cholera, of which, in this country, Mr. J. Simon is the ablest exponent. He appears to be unaware of the fact that by these teachings, based upon experience and observation, the several theories which he displays categorically come into one connected view, and that, whether as to their practical or scientific bearing, they form, thus viewed, one of the most satisfactory illustrations of modern medical research and theory.

Unfortunately, the insufficiency and imperfection of Dr. Macpherson's knowledge of the present state of the etiology of cholera pervade and mar considerably his book; but, notwithstanding this, the careful reader will not fail to discover its great historical worth.

On some Affections of the Liver and Intestinal Canal, with Remarks on Ague and its Sequelæ, Scurvy, Purpura, &c. By STEPHEN H. WARD, M.D. Lond., F.R.C.P., Physician to the Seamen's Hospital, to the Hospital for Diseases of the Chest, Victoria-park, &c. London: J. and A. Churchill. 1872.

THE preface indicates that the contents of this book are of a purely practical character, embodying experiences of the author derived chiefly from a long connexion with the Seamen's Hospital as visiting physician; and a perusal of the volume leads to the conclusion that this plan is faithfully carried out. Dr. Ward divides his work into nine chapters, treating respectively of abscess of the liver, cirrhosis, hydatid disease of the liver, jaundice, intestinal obstruction, dysentery, peritonitis, ague and its sequelæ, scurvy, and purpura. It may be said with some sort of justice that these subjects embrace far too wide a field to be treated of in an octavo of 260 pages; but the purpose of the book, as above-mentioned, appears to be fulfilled more for the advantage of the practitioner than for the man of science. The chapter on abscess of the liver comprises a careful *résumé* of the history, treatment, and results of twenty-six cases that have been met with in the author's practice. The aids to diagnosis are dwelt upon at some length, and are well worth reading carefully; the wisdom of interfering surgically is discussed, and exception

is taken to the ruling of Budd and others, that most, if not all, hepatic abscesses are caused by dysenteric mischief. The chapter on cirrhosis should be useful to most practitioners, for it contains a very concise account of the symptoms of the disease, as well as its pathology and treatment. The observations on hydatid disease of the liver and jaundice do not call for special comment, but we are glad to welcome another brief but useful contribution to medical literature on intestinal obstruction. The reader is reminded that obstructions may be due (1) to peritoneal bands and adhesions; (2) invagination or intussusception; (3) stricture from malignant growths in the walls of the intestine from cicatrisation and thickening attending dysenteric or other kinds of ulceration; (4) compression of intestine by tumours external to it; (5) impaction of fæces, gall-stones, and other foreign bodies; (6) paralysis of intestine. One or more cases are given illustrating each of these varieties, and the differential diagnostic aids are carefully put. It is very satisfactory to know that Dr. Ward considers opium to be the "sheet-anchor" in the treatment of all such cases, and insists forcibly upon its regular and continuous exhibition as long as the acute symptoms prevail. The medical wards of the Seamen's Hospital are so well supplied with cases of chronic dysentery that we are somewhat surprised to find the article on this subject one of the weakest in the book, the more so because we know of no author by whom the subject has been at all attentively or exhaustively treated. It appears that the sum and substance of treatment, according to Dr. Ward, consists in strict rest, bland diet, an occasional dose of castor oil and laudanum, with little or no other medicines; and it is somewhat humiliating, on the score of therapeutics, to know that a physician having an opportunity of seeing upwards of sixty cases of dysentery every year has arrived at this conclusion. Passing over the subject of peritonitis, we may remind the reader that ague and its sequelæ are well and practically discussed, including a peculiar form called by the author West Coast fever, the subjects of which find their way to this country from the West Coast of Africa, the West Indian islands, and the coast of South America, in a miserably weak and anæmic condition. It is hardly necessary to say that the chapter on Scurvy, as emanating from the *Dreadnought* Hospital, is sufficient in quality and quantity, describing more of the history and etiology than the special symptoms of the disease, which latter are nevertheless clearly detailed in an illustrative case concluding the article.

It is now more than half a century since the Seamen's Hospital was established, and we believe this to be the second medical work only that has emanated from the professional officers of that institution. That this is to be regretted few can doubt, for the hospital contains an abundance of good material of a specially cosmopolitan kind. We recommend this book to our readers as a good and practical result of work in soil that has not hitherto been cultivated enough for their benefit.

PROF. HUMPHRY'S LECTURES ON HUMAN MYOLOGY.

Delivered at the Royal College of Surgeons, June, 1872.

LECTURE III.

THE muscles of the deep ventro-appendicular stratum may be divided into sectors like those of the superficial stratum—namely, dorsal, plantar or palmar, anterior and posterior. The dorsal in the fore limb is represented by the infraspinatus and the teres minor, and in the lower by the gluteus medius and minimus. The teres passes to the pre-axial tubercle of the humerus, and the two latter muscles to the post-axial tubercle of the femur; but this difference depends on the difference of rotation which has taken place in the two limbs, and has not the significance that has been attributed to it. Modifications of developmental processes take place very freely in adaptation to requirements. The anterior sector consists of the supraspinatus, which corresponds to the iliacus; and the posterior sector is the teres major, corresponding with the pyriformis. The palmar sector is formed by the coraco-brachialis and subscapularis in the upper limb. In the lower limb the homologous plantar series, the adductors, are far more extensively developed—corresponding with the greater development of the pubic and ischiatic parts of the hip-bone, which are generally admitted to correspond with the coracoid. In the monotremes the homology of these muscles is much more distinct than in man.

Other derivations of the ventral muscle extend towards the girdles, and constitute the deep ventro-scapular and ventro-pelvic muscles. Those in the upper limb are, costo-clavicular, serratus, levator scapulæ, and omo-hyoid. The subclavius, serially correspondent to the intercostals, represents in man the costo-coracoid of those animals in which the coracoid reaches the sternum. The muscle which passes from the ribs to the scapula, anterior or inferior to the glenoid cavity—i. e., passes to the coracoid part,—is always separated from the muscles passing from the ribs to the scapular girdle on the distal side of the glenoid cavity by the great vessels and nerves passing to the limb. The omo-hyoid is the only remnant in ourselves of the extensive connexion in many of the lower animals between the deep cervical muscles and the girdle. The interruption in it, like that in the digastric, is in the situation of one of the septa of the ventral muscle.

In the quadratus lumborum we have the serial homologue of the levator scapulæ. That of the omo-hyoid must be found in some fibres of the external oblique which attach themselves to the fore part of the pelvis. The costo-coracoid and costo-clavicular find their nearest approach in the coccygeus; the serratus in the ilio-caudal muscle of the lower animals. In them the large vessels pass between the ischio-caudal and the ilio-caudal, as in ourselves between the costo-clavicular and the serratus. The limitation of the movements of the limbs in the higher animals necessitates a corresponding limitation in the muscular development. The muscles come to present antagonistic correspondences, and in their action an antagonistic harmony. Every movement is effected by two sets of muscles, the one regulating the action of the other.

Dissection of the lower animals shows clearly that the coraco-brachialis, biceps, and brachialis anticus form one series. In ourselves they are segmented for the purpose of special action. Special muscles for pronation and supination of the forearm—pronator teres and supinator longus—combine, in action, with the special flexor muscles to flex the elbow, and thus a considerable saving of muscular fibre is effected. The extensor of the forearm and quadriceps of the leg are homologously serial. The different aspect of the two muscles is explained by the different rotation of the two limbs. In the bat, where the opposite rotation of the hind limb has taken place, the rectus arises from the posterior surface. In that animal a patella is developed in the triceps tendon of the fore limb. The insertion is, in the leg, into the tibia, which is the chief supporting bone; in the arm it is into the ulna, so as to leave the radius free. The arrangement in the amphibians clearly shows that the biceps flexor cubiti is a derivative from the extensor gluteo-rectus mass, and is not originally a flexor, but has become so by being interrupted by the ischium growing downwards. The pelvic part of the biceps has no homologue in the upper limb; the short head corresponds to the brachialis anticus. The semimembranosus corresponds with the glenoid part of the biceps flexor brachii, the semitendinosus with its coracoid portion. The interpretation Dr. Humphry gives to the tendinous inscription in the middle of the semitendinosus is, that that muscle is the representative of two muscles in the Cryptobranch, the upper part representing the caudo-crural, a muscle closely related to the rest of the gluteal muscles, and which descends to join the flexor mass, still represented in the lower part of the semitendinosus.

The pronato-flexor mass in the fore limb is divisible into a superficial and a deep stratum, and the former into three sectors. The radial sector comprises the pronator teres and

flexor carpi radialis. The former presents a connexion with the ulna as well as with the humerus and radius—a connexion found in the chimpanzee, but nowhere else till we reach the reptiles, but which represents in a very interesting manner the passage from bone to bone of the fibres of the single muscular mass in some lower animals. The existence of this is connected with the extensive power of pronation and supination which we possess, and its use is to pronate the arm when the elbow is flexed. The second sector is intermediate, formed of the palmaris longus and flexor digitorum sublimis. The third or ulnar sector consists of the flexor carpi ulnaris. The deeper stratum constitutes the flexors of the digits, and is subdivided into flexor longus pollicis and flexor profundus digitorum—a division peculiar to ourselves, and one of the very few peculiarities which man has in his muscular system.

The pronato-flexor mass in the lower limb differs in its action on the os calcis, and the consequent muscular modifications required. The representatives of all the members of the superficial stratum are condensed in the one outer or fibular head of the gastrocnemius. The serial homologue of the flexor sublimis digitorum is the plantaris, which is in some animals continued into the short flexor of the toes. The tibial head of the gastrocnemius has no representative in the fore limb; it is absent in some of the lower animals. The flexor carpi radialis and flexor digitorum profundus are represented by the tibialis posticus, flexor longus digitorum, and flexor hallucis, of which the first is also confined in its action to the ankle.

The supinato-extensor mass may be divided in a similar manner. In the superficial layer we have the supinator longus, extensor carpi radialis, extensor sublimis (as it should be called, not longus), corresponding to the flexor sublimis, and extensor carpi ulnaris, corresponding to the flexor. In the lower limb these are represented by the tibialis anticus, the superficial part of which corresponds to the supinator longus and extensor carpi radialis, by the extensor longus digitorum corresponding to the extensor digitorum sublimis, and by the peronei corresponding to the extensor carpi ulnaris. The peronei afford an instance of total difference of function resulting from slight difference in disposition, only one, the peroneus tertius, retaining its function as extensor.

In conclusion, the Professor said a few words concerning the difference between a hand and a foot. He first criticised Dr. Haughton's theory that it depended on a certain point in the disposition of the flexor tendon, and that there resulted a difference in weight of different portions of that tendon. He had weighed equal lengths of the tendon above and below the point round which it worked, and found them of equal weight. This was the case in both hand and leg. Care should also be taken, in comparing the hand and foot, to set aside those features which distinguish the terminal part of the hind limb from the terminal part of the fore limb, features which belong to the differences between limbs, and not between a hand and a foot. Such are the points chiefly relied on by Professor Huxley—the disposition of the tarsal bones, the presence of an extensor and flexor brevis digitorum, and the presence of a peroneus longus. Such points, however, merely distinguish the terminal part of a hind limb from the terminal part of a fore limb, and will do so equally in the case of the lower animals. The important thing is to settle what are the features in the terminal part of either limb which shall enable us to distinguish it as a hand. The word "hand" is derived from man's hand, and its distinguishing points are, relative length and mobility of the phalanges and of the first digit on the carpus, and certain muscular peculiarities—segmentation of the flexor pollicis, specialisation of extensor ossis metacarpi pollicis, and presence of an opponens pollicis and opponens minimi digiti; and, lastly, the peculiar disposition of the interossei. Judged by this test we may fairly state that the terminal part of the hind limb in the gorilla has as much claim to be considered a hand as the terminal part of the fore limb, and other arguments must be brought forward before we can hesitate to apply the term quadrumanous to such animals, or refuse to man that evidence of subdivision of labour and of high organisation which is so signally implied by the term bimanous. These points of distinction between the hand and the foot may seem small, but it is the evidence of the highest of all skill to educe great results from slight modifications.

LOCAL SELF-GOVERNMENT.

FROM Chatham there comes a remarkably *apropos* and striking illustration of the complexity and inefficacy of the methods—if a term implying order may be used in reference to a procedure which is simply chaotic—by which the attempt has been hitherto made to deal with the more pressing requirements of our town populations. In *The Times* a few days ago there was a statement that at New Brompton, described as "a rising and populous, but badly kept town near Chatham," the inhabitants had been polled to determine whether, in conformity with the expressed views of the Local Government Board, the town should be formed into a separate district for sanitary purposes under the Local Government Act. There appears to have been much strong feeling excited upon the point, and the result of the poll shows a majority of 50 against the adoption of the Act, the numbers voting being 622 for, and 672 against.

Now it happens that the real nature of the case by no means appears from the foregoing statement, and as it is a remarkable one in many respects, we add a few facts which will make the matter clear. Chatham and Rochester are, as is well known, in close contiguity with one another; and they comprehend, within the parliamentary limits of the former and the municipal limits of the latter, the whole or parts of the parishes of Chatham, Gillingham, Strood, Frindsbury, St. Margaret, and St. Nicholas. Old Brompton and New Brompton are parts of the parishes of Chatham and Gillingham; and the Boundary Commissioners in 1868, proposing to extend the parliamentary limits of the borough of Chatham so as to include the whole of New Brompton and Gillingham village, described these parts as forming "an urban district, closely, and in some cases continuously, connected by buildings with the borough, and occupied by persons having identical pursuits and interests with the town population." There can be no doubt, in fact, that so far as sanitary interests are concerned, the whole of the places thus grouped together at the mouth of the Medway ought to be regarded as one community. We have only to turn for proof of this to a report by Dr. Buchanan in 1870, on the sanitary state of Rochester and Chatham. After showing the close association of these towns, Dr. Buchanan makes the following observations:—"Nothing of unity, however, is to be discovered in the local government of the town. Not only as parliamentary boroughs are Rochester and Chatham distinct, but various parts of Rochester are for various local purposes distinct from other parts of Rochester; Rochester is for almost every local purpose wholly distinct from Chatham; and Chatham, again, has various parts distinct for various local purposes from its other parts. Both as regards area of jurisdiction and extent of function, it is extremely perplexing to know what is the authority for particular purposes in particular parts of the town."

Dr. Buchanan was enabled, with the aid of the local knowledge afforded by Dr. Aveling, to make out a statement showing, at least approximatively, the several authorities and their areas of jurisdiction; he does not, however, guarantee the correctness of the statement, for "probably," he says, "there is no one person in the two boroughs who could enumerate all the authorities acting in the local government of the compound town," which, altogether, is much smaller than the metropolitan parish of Islington, and has about a third of the population of that parish. No less than fifteen different authorities appear, then, to have either distinct or concurrent jurisdiction for the purposes of (1) paving, (2) watering and cleansing streets, (3) lighting, (4) police, (5) sewerage, (6) water-supply, (7) nuisance removal, (8) cesspool and ashpit emptying, and (9) regulating the construction of buildings. The Rochester Town Council, the Chatham Local Board, the Dean and Chapter of Rochester, various lighting and paving commissions, highway boards, and water companies, together make up this medley of local self-government. We regret that we have not space for the display in tabular form of Dr. Buchanan's analysis of the several jurisdictions of these bodies. An example or two must suffice. Thus, the part of Chatham parish within the municipality of Rochester is

paved and lighted, the streets are watered and cleansed, and the sewerage is done by the St. Margaret's Paving Commission; the nuisance removal is in the hands of the Town Council; the paving, street watering and cleansing, and sewerage of the city part of St. Margaret's (Rochester) is done by the St. Margaret's Highway Board; the lighting by the Rochester Paving Commission; the nuisance removal by the Highway Board and Town Council jointly. The Gillingham Highway Board appears to have control over the whole of that parish (including New Brompton) for paving, street watering and cleansing, and sewerage; the lighting being in the hands of a special commission.

So much for the state of things existing. Obviously a thorough remedy would be to consolidate all the powers and jurisdictions of the fifteen (or more) authorities into one, and Dr. Buchanan therefore set this down as the first sanitary want of the towns. But failing this, and having regard to the possible local objections to one authority on the score of expense, it was recommended that the Rochester Town Council should adopt the Local Government Act; and that the Chatham Local Board district should be extended so as to include the whole of Brompton and Gillingham. Why, in the face of Dr. Buchanan's report, the Local Government Board should ever have proposed to constitute New Brompton a separate sanitary district is incomprehensible to us. And as this proposition has been negatived by the inhabitants, it is to be hoped that the subject may be reconsidered by the Local Government Board, in order that a farther division of sanitary jurisdiction in Rochester and Chatham may if possible be avoided.

THE CHOLERA.

THE diffusion of cholera in South Russia has again obtained such magnitude that the Imperial Government has found it requisite to issue returns of the distribution and progress of the disease. From the first of these returns we learn that the reports which have from time to time appeared in THE LANCET during the past three months have understated the gravity of this year's outbreak in the Russian Empire. The disease is scattered over the whole of South and Little Russia, and has appeared at more than one place in Great Russia, and on the borders of West Russia. The localities which would appear to have chiefly suffered are the city of Ekaterinoslaw and the district of Verkhniédnie, in the government of Ekaterinoslaw; the city of Kiew and the district of Oumane, in the government of Kiew; and the district of Krementchoug in the government of Poltava. The disease is very widely scattered along the valleys of the Dniester and the Dnieper and their affluents; and from Odessa, where the malady is now prevalent, dissemination has begun to take place to other parts of the shores of the Black Sea. We give in the next column a table explanatory of the preceding passage.

It is difficult to estimate the prospects of Western Europe as to cholera during the present year in the face of this renewed diffusion of the disease in South Russia. At the close of last year it seemed, from the wide dissemination of cholera in Northern Europe, that we were on the eve of another general outbreak. The progress of the malady to the present time during this year gives rise to a hope that the maximum of spread may have been attained in the past year, and that we are now witnessing that reawakened activity in limited areas which occasionally marks the decline of epidemics of cholera. But be this as it may, the fact that the infected districts on the Dniester and the Dnieper have, as has recently been pointed out by Mr. J. Netten Radcliffe, now been brought into close connexion by railway with Western and Central Europe makes it necessary that we should not, on account of the distance of the present field of activity of the disease and from the comparatively limited diffusiveness which it has as yet exhibited, lull ourselves into what might prove to be a false sense of security.

A telegram from Constantinople recites that the *Rainton*, a Newcastle steamship, got on shore at Buyukdere some fourteen days ago. The Turks found one man on board dead from cholera, and three others very ill from the same disease, and, of course, quarantined the ship, which had come from Odessa and was bound direct for England. As we still continue to admit dirt and disease into the port of London free of duty, it is perfectly possible that this vessel, if she had not providentially grounded on the shores of the Bosphorus, would have by this time quietly steamed up the Thames, and hauled into one of the docks without let or hindrance. It is to be fervently hoped that Mr. Stansfeld has not thrown overboard the sub-clause of the Public Health Bill relating especially to the port of London.

The last accounts from Kherson in Russia say that the disease, which commenced on the 25th of May, still continues with undiminished vigour.

Table of the Progress of Cholera in Russia.

District.	Cases.	Recoveries.	Deaths.	Under treatment.	Date.
Voronège Government:					
1. Zemliansk	2	2	—	—	June 13.
2. Volonisksu	4	—	1	3	May 13.
D'Ekatherinoslaw Govern.:					
1. Ville d'Ekatherinoslaw	316	169	94	98	
2. Ville d'Alexandrow ...	4	—	—	4	
3. Ville de Rostow	2	—	2	—	June 12.
4. D'Ekatherinoslaw	24	—	9	15	
5. De Verkhniedunieprovsk	161	55	60	46	
De Kiew Government:					
1. Ville de Kiew	260	37	96	127	June 7.
2. D'Oumane	161	75	46	80	June 2.
De Zchernigow Governmt.:					
1. Ville de Zchernigow ...	10	1	3	6	
2. Ville de Konotop	1	—	1	—	
3. De Konsiets	12	—	5	7	June 11.
4. De Sourje	6	—	2	4	
5. De Oster	1	—	1	—	
6. De Niéjine	9	—	1	8	
De Koursk Government:					
1. Ville de Kourek	1	—	1	—	June 5.
De Kharkow Government:					
1. Ville de Kharkow	3	3	3	—	June 13.
Kherson Government:					
1. Ville d'Odessa...	27	—	11	16	June 13.
De Poltava Government:					
1. Ville de Poltava	1	—	—	1	June 15.
2. De Krementchoug... ...	278	117	144	187	June 13.

From statements which have been recently made in foreign papers it appears that upwards of fifty persons have been attacked with cholera in Khotine, in Bessarabia, and thus the report which was in circulation as to the appearance of this disease in that place is confirmed. The type of the malady is spoken of as the true Asiatic, being attended with vomiting, cramps, and diarrhœa, and the patients succumbing in a few hours.

The *St. Petersburg Journal* states that since the commencement of the epidemic of cholera in Kiew to the 20th of June there have been 2338 persons attacked; of these 1032 have died, 715 have recovered, and 531 remain under treatment.

At St. Petersburg it is reported that the master of a British ship has died of cholera.

The Turkish authorities have imposed a quarantine of ten days on all arrivals at Constantinople and Sulina from Russian ports.

The *East German Gazette* reports that several cases of cholera have occurred in the western frontier districts of Russia.

THE "Wrexham Guardian" of June 29th reports that W. Roberts, of Leeswood, and T. Waldron, were summoned before the magistrates for having neglected to produce their children a week after vaccination, as required by Section 17 of the Act of 1867. Dr. Williams gave evidence that the children had been vaccinated, and not brought back to be inspected. The defendant's wife pleaded as an excuse fever in the house. In consideration of these being the first cases of the sort, both defendants were let off on the payment of costs only.

THE LANCET.

LONDON: SATURDAY, JULY 6, 1872.

THE propriety of establishing a legislative control over habitual drunkards, analogous to that which has been long established over the insane, is a question on which there is great diversity of opinion. We ourselves have always supported the principle with which the name of Mr. DALRYMPLE has of late become identified; and, although we are quite conscious of the objections that may be urged, with some show of reason, against his proposals, and although we fully sympathise with those who would surround personal liberty with all possible safeguards, yet we are convinced that the opposition rests mainly upon two bases—upon ignorance of the magnitude of the evil that is to be overcome, and upon ignorance of the character and powers of resistance of the wretched examples of intemperance whom the law is asked to protect against themselves.

Whatever may be the character of the opposition, there can be little doubt that it will be for a time successful; for public opinion is not yet ready to accept the recommendations contained in the Report of the Select Committee upon the question. The statements made before this committee must be repeated again and again, and must be pressed home to the public mind through various channels, before it will be generally perceived that there is no analogy whatever between the habitual drunkard and the chance victim of a carouse—no possibility that provisions designed for the restraint of the former could ever be put in force against the latter.

In this process of education, so to speak, a very important part might be played by asylums or institutions for the reception of drunkards desirous to reform. Such institutions, as our advertising columns bear witness, are by no means unknown in great Britain; but they have not assumed a development at all approaching that which Mr. DALRYMPLE has described as existing in the United States, and people in general know very little about their operations. They are strictly private establishments, and their proprietors or managers have to contend against the difficulty of having no legal control over the inmates. Now moral suasion is all very well in its way; but it wants some more powerful influence at its back. The normal state of the habitual drunkard is to spend his life in periods of craving and indulgence, followed by periods of penitence or remorse. While these last he is very amenable to treatment; but as soon as the craving returns he will disregard all promises of amendment, and will use any or all means of satisfying his desire. How far he is then a responsible agent is a curious and interesting question, but hardly a practical one; for it is quite plain that he can only be dealt with beneficially on the hypothesis that he is *not* responsible. Now, in order to render asylums really useful, this hypothesis must be confirmed, for a certain period at least, by law. A drunkard who, in his lucid or penitent intervals, desired to reform, should have facilities afforded him for making a declaration to that effect before a magistrate; and should be allowed to surrender his personal liberty, beyond recall, for the purpose of treatment, for a time not exceeding six or twelve months. During such time he should be liable to incarceration under lock and key, or within the limits of an establishment, if such a measure were deemed necessary for his recovery.

If such powers as these were conferred, the public would necessarily require some guarantee against their abuse. As the drunkard would himself be required to sign the document on which his detention would be justified, and would be interrogated by a magistrate with regard to his comprehension of its meaning and effect, there would be no room for fear that it could ever be made a means of putting an inconvenient person on one side for a few months. The practical danger would be lest the establishment should fall into the hands of teetotallers or other enthusiasts, and lest the inmates should be injured in health by the measures taken to reclaim them. The arrival of the period of craving, especially for the first time, would call for the most careful medical as well as dietetic management; and we doubt whether the cases in which it occurs are yet sufficiently well understood for even the principles of such management to be matters on which there is complete accord in the profession. The obvious corollary is, that institutions for drunkards would require a resident medical superintendent, capable of observing and appreciating the actual state of every patient, and of profiting by the experience which he would in time acquire. The uses of opium, of chloral hydrate, of various nervine tonics, and of physical fatigue, would need full and careful investigation; and it cannot be doubted that much would soon be learned with regard to the best means of warding off the craving for drink, of which we believe the drunkard is always conscious before it acquires sufficient power to overcome his feeble efforts at self-restraint.

We would therefore urge upon Mr. DALRYMPLE, if Parliament should be indisposed to concede such legislation as his own knowledge and experience would suggest, that the proverbial "*reculer pour mieux sauter*" would admirably meet his case. We would urge upon him to introduce a Bill giving powers to a company or body of subscribers to establish a drunkards' asylum on a proper scale, under medical management and control, and fitted with every appliance for its work. The same enactment should enable the drunkard, during an interval of sobriety, to deprive himself of his liberty of action, and to submit himself to the authority of the asylum superintendent. There are large numbers of inebriates, originally of the higher classes of society, now a burden and terror and disgrace to their relatives, many of them pensioned off in remote Welsh and Scotch villages, or otherwise put out of the view of those among whom they were once entitled to move. Upon many of these people, and upon many now descending towards their level, sufficient pressure would be put to induce them to enter an asylum such as we have indicated; and, if any fair percentage of them could there be cured and restored to the world as sober and trustworthy persons, the argument in favour of the compulsory seclusion of such as were

unwilling to submit would be immensely strengthened. It is quite certain that our drunkards cannot be suffered to remain, as at present, utterly uncared for by society; and we fear society is not yet prepared to discharge its full duty with regard to them.

FOR once we have not to go beating about the bush to ascertain whether or not an alleged wrong has been committed. Mr. CHICHESTER FORTESCUE has promptly informed the House of Commons that the report of his Inspector proves that the complaints of a deficiency in the water-supply of the districts of Bermondsey and Rotherhithe are well founded, and that for several days there had been "a serious want of water." The *South London Press* of Saturday last referred to the dearth as still continuing, although not to so great an extent as in the previous week. It is unnecessary that we should give any of the details of this local water-famine; for some of the daily press have sent round special reporters, and we may presume that our readers have seen enough of their descriptions to be satisfied that the state of things is sufficiently grave to call for immediate consideration and remedy.

Mr. FORTESCUE states that the "immediate cause" of the deficiency in the Bermondsey district was the choking up of the filter-beds by weeds; but that the "real cause" was that there was not a sufficient storage of water in the Southwark Company's works. There was, he said "another cause" which had contributed to the evil in Bermondsey—namely, the very defective state of the fittings of the houses. All three of these "causes" are themselves simply the effects of a first cause, which is the delegation by the State to a number of purely commercial bodies of duties and powers which belong properly to one public body representative of the whole metropolitan community. As to the last of Mr. FORTESCUE's three causes, it must not be supposed that Bermondsey has a monopoly of the class of property which is badly provided with water-fittings; and we fail to see that, all other things being equal, there is any reason why the Southwark Company should find the difficulties of supply to Bermondsey insuperable, any more than the New River or East London Companies do in respect of the small tenement property of which they have their full share. The dearth of water in Bermondsey is, in our opinion, due to the fact that the Southwark Company's means of supply have not kept pace with the requirements of a rapidly increasing constituency. The history of this Company's doings for many years past would be well worth publishing in the shape of a connected narrative, and if every member of Parliament were then required to pass a competitive examination upon the facts narrated, the effect as regards future legislation bearing upon such matters would probably be salutary. Time after time defects in the quantity or quality (or both) of the Company's water have been complained of by the consumers, and in every case it has needed the intervention of a Government official to compel the Company to fulfil its obligations according to law. Notwithstanding the Act of 1852 forbad the use of the tidal part of the Thames for supply purposes, a Government inquiry elicited the fact that in 1865 a million gallons were distributed to the Southwark Company's district from this illegal source; and we know from Captain TYLER's report that the communication between the Battersea works and the tidal river flowing close by was not closed so as to preclude all suspicion of wrong-doing until the middle of last year. "Man never is, but always to be blest," says POPE; and of the Southwark Water Company it may be said that whenever its proceedings are investigated the result invariably is to show that something or other which ought to have been done long before is going to be done soon. Thus Mr. NETTEN RADCLIFFE reported in 1869 that "the Southwark is the only metropolitan water company that dispenses entirely with service reservoirs for the filtered water." The effect of this arrangement can easily be conceived, when it is remembered that the action of the filter beds is subject to great fluctuations, which may or may not be coincident with a greater or less demand upon them by the pumps with which they are in direct communication, and that consequently the question of a general or local failure in the supply may at any moment depend upon circumstances against which nothing but a sufficient service-storage can effectually provide. There can be no doubt that so obvious a remedy should have been adopted immediately after Mr. RADCLIFFE's report was made; yet Major BOLTON reported to the Board of Trade in February last that "this Company is now constructing two high-level and covered storage reservoirs at Nunhead, which are under contract to be completed *in eighteen months from this time*." It cannot be very satisfactory to the inhabitants of Bermondsey and Rotherhithe to learn that they have the prospect of another summer's scarcity of water before any permanent relief can be afforded them.

There is a point in this business which seems to us to require a little explanation. Four months ago Major BOLTON reported that the filtering power then possessed by the Company "appears to be sufficient to ensure good filtration"; and yet the Bermondsey people are now told that "an immense quantity of vegetable matter, having immediately preceded the late storm and come down the river, had choked the filter-beds." Is, then, the filtering power of the Company a mere fair-weather provision not calculated to meet emergencies?—and, if so, can it in any proper sense be deemed "sufficient"? Mr. RADCLIFFE had in 1869 a clear prevision of what has actually happened in respect of the Southwark Company. While admitting that the new works then in progress would put the Company "on a level with its present requirements," he remarked that, if the demand upon its supply continues to increase at the rate of the past two years, the margin of provision, even for the near future, appears to me to be too scanty." Well, the average daily supply, which had increased from 12,500,000 gallons in 1866 to 14,483,000 gallons in 1868, was 16,427,386 gallons in 1871, showing that the rate of increase in the demand has continued. But a better test of the exigencies of the Company is supplied by reference to the growth of population within its district. And we find that in eight of the registration sub-districts in South London, wholly supplied by the Company, the population increased at the rate of 23 per cent. in 1851–61, and at the rate of 46 per cent. in the following ten years. The population of St. James's,

Bermondsey, has increased 90 per cent. since 1861; while in Battersea the increase has been from 19,600 in 1861 to 54,016 in 1871—that is, at the rate of 175 per cent. It must, we think, be self-evident that the Company is not now, nor is likely to be for some time to come, in a position to give an adequate supply of water throughout the whole of its area; and we submit that this is a matter which cannot too soon be inquired into. As the *Spectator* justly says, if this "artificial drought maintained from greed, which may breed a pestilence," had occurred in Belgravia for twenty-four hours, Parliament would be in furious excitement.

THE old and, as we had fancied, obsolete monopoly of the Apothecaries' Company threatens to be revived again by County Court judgments. We had all been thinking that the Act of 1858 equalised all medical qualifications so far as legalising any department of medical practice was concerned, abolished all territorial limitations of qualification, and removed the scandal that a member of the profession fully qualified in Scotland had no legal standing in England and *vice versâ*. But two recent County Court judgments, if sustained by superior Courts, will have the effect of driving candidates for medical licences to the Apothecaries' Company, away from the Colleges of Physicians and the Universities, for their medical qualifications. We lately reported the case of STEVENSON *v.* GLIDDON, in which the County Court Judge confirmed the award of an arbitrator who had disallowed the plaintiff's charges for medicine alone, supplied independently of special visits or advice, on the ground that he could not recover for medicine supplied to the defendant as the plaintiff was not qualified as an apothecary. And, to-day, a letter will be found in another column detailing a similar judgment in another case. Dr. M——, who is M.D. of Glasgow and C.M., sued a gentleman for £10 for advice and medicines. The defendant admitted that he received both; but the Judge ruled that the plaintiff could not recover for medicines, not being a licentiate of the Apothecaries' Company.

Our opinion is that this is very bad law, the promulgation of which is calculated to have very ill effects. Section 31 of the Medical Act distinctly provides that every registered person shall be entitled, according to his qualification, in any part of Her Majesty's dominions, to practise medicine or surgery, or medicine and surgery, as the case may be; and to *demand and recover in any court of law reasonable charges for professional aid, advice, and visits, and the cost of any medicines or other medical or surgical appliances*, rendered or supplied by him to his patients. The only bar to any such legal proceedings on the part of practitioners is in the case of Fellows or Members of the Colleges of Physicians, the bye-laws of which colleges may forbid all actions at law for the recovery of professional debts. In our opinion there is no doubt that, according to the Act of 1858, a Doctor of Medicine can recover for medicines as well as for medical attendance. We take it that where there is an inconsistency between this section of the Act of 1858 and the Apothecaries Act the provisions of the later Act are to be read just as if the Apothecaries Act did not exist; at any rate, the provisions of the later Act prevail and express the existing law. Section 31 of the Act of 1858 is in no degree controlled by the prior existence of apothecaries' privileges; and it, as expressly as words can do, lays down a rule for the remuneration of medical men in all parts of the United Kingdom, thus putting aside all former local rules so far as they differed from the new rule. The whole drift of the Act is to put on an equality, in all parts of the kingdom, persons having any of the qualifications mentioned in the schedule.

The University of Edinburgh rather agrees with Mr. MACNAMARA's judgment in regarding the medicines supplied by Dr. STEVENSON, apart from immediate visits or advice, as furnished by him otherwise than in the character of a medical adviser. We hope the University will reconsider this point. When patients ask their doctors for medicines which they have had before, it would be hard to deny them; the medicines are tried medicines, which have been found to be beneficial. It is surely, therefore, a hard judgment that medical men are not to be paid for such remedies; and it is strange that the University of Edinburgh should so easily acquiesce in a judgment involving a serious disability to its graduates. It is unfortunate that as yet in many cases medical practitioners must supply medicines to their patients; and unless the superior Courts reverse the County Court judgments, the Apothecaries' Company will have a new lease of privilege and monopoly.

THE dog-days are at hand; the energy of our legislators at St. Stephens is very naturally beginning to flag; counts-out are becoming numerous; and the massacre of the innocents has begun. The persistency with which the Prime Minister and Mr. STANSFELD have been assailed on the subject of the Health Bill has gone for next to nothing, and the latter told the House some five days ago that he must throw part of his cargo overboard in order to have any prospect of landing the residue. As the so-called Amended Bill has but just appeared, it is impossible to criticise the mutilations that have been practised. But as all clauses relating to nuisances, gas, water, and pollution of rivers are expunged, we may take it that the Bill is to be simply bisected, and that clauses 1 to 30, relating severally to sanitary and port sanitary authorities, alterations of areas, and union of districts, will be alone preserved. This being the case, it is perfectly possible for the President of the Local Government Board to frame an Act which, though not complete, will be, as far as it goes, workable enough. Very little indeed will have been done towards accomplishing the comprehensive sanitary reforms proposed by Sir CHAS. ADDERLEY; but it is plain that the clauses above mentioned have little or nothing to do with those expunged, and, if moulded properly into an Act, will do much towards making sanitary work simple as to the legal modes of its performance. For, until the authorities by whom the sanitary work of the country is to be carried on, and by whom it is to be paid for, are clearly defined, it is worse than useless to create and multiply clauses relating to special insanitary circumstances that exist in particular localities. It remains, however, to notice the introduction of additional and important miscellaneous clauses. By Clause 32, the working of the Alkali Act is transferred from the Board of

Trade to the Local Government Board. Clause 34 recites, among other things, that the Local Government Board may, by order, distribute the business to be performed under the Local Government Board amongst the several officers and persons transferred by this Act to the Board in such manner as the Board may think expedient, and the next clause relates specially to the salary of the medical officer, confirming the provisions formerly made for its payment. There are also several other changes, chiefly relating to finance, which we propose to notice fully next week, for there is little prospect of the Bill actually reaching Committee during the next ten days. We are, however, by no means ill-pleased that the loaf is to be divided, because we believe that the other half may be presented to us next year considerably altered in composition, and so much more digestible.

Medical Annotations.

"Ne quid nimis."

THE COLLEGE OF SURGEONS' ELECTION.

THE election of members of Council took place on Thursday last under unusually quiet circumstances, since, as already announced, there were only three candidates, Messrs. Hancock, Curling, and Holt. The President (Mr. Busk) took the chair at two o'clock, when fifteen Fellows, the number required to form a quorum, were fortunately present. The voting proceeded languidly until twenty-five minutes to three, when the President announced that the ballot would close in ten minutes if no more votes were recorded; but a few more Fellows dropped in until three o'clock, and at ten minutes past the ballot closed. The numbers were immediately called aloud, and proved to be as follows:—Mr. Curling, 41; Mr. Hancock, 31; Mr. Barnard Holt, 30. The number of voters was 48, and of these 23 voted for all three candidates, 8 for two candidates, and the following were the plumpers:—Mr. Hancock, 10; Mr. Curling, 1; and Mr. Holt, 6.

CONVERSAZIONE AT THE ROYAL COLLEGE OF PHYSICIANS.

SELDOM have the stately portals of the Royal College of Physicians unfolded to a greater "*unda salutantûm*" than on the evening of Saturday, the 29th ult., when the President and Fellows held their annual *conversazione*. The objects exhibited in the library were as varied as they were interesting and valuable. Messrs. Graves contributed, among other paintings, a very fine one of the Royal Family. Minerals from Vesuvius, with recent lava and dust from the streets of Naples, were lent for the occasion by the Baroness Burdett Coutts and Sir James Lacaita. The Indian Museum was brilliantly represented by a collection of articles from the Secretary of State for that dependency; while the West Indies, and the Pyramids with specimens of the stones of which the latter were built, were illustrated by the contributions of Drs. Gavin Milroy and Carpenter. Dr. Taylor's electric forceps; Mr. Thomas Wills's modification of Siemen's induction-tube for producing ozone; Dr. J. W. Ogle's objects dug out of the lake habitations of Switzerland; the microscopes of Messrs. Powell and Lealand, Thomas Ross and Co., Mr. How, Messrs. Murray and Heath; and, best of all, the patent stereoscopic binocular ones of Mr. Holmes, which by giving visibility to thickness in addition to length and breadth, render all opaque objects visible in true stereoscopic relief under the strongest light in a flat field—were the subjects of close inspection and cordial admiration. The Autotype Company were well represented in a series of transcripts of Fellows of the Royal Society; while the art-objects were still further reinforced by contributions from J. E. Gardner, Esq., Messrs. Elkington, Messrs. Bell and Daldy (who lent George Cruickshank's works, select portraits by Titian, Velasquez, &c.), Mr. Bentley, Messrs. Vincent Brooks, Day and Son, and Dr. H. Sutherland, who contributed a number of striking typical photographs of the insane. Mr. Appe's new portable medical battery was also much admired; and, not less so, the hourly self-recording aneroid barometer of the London Stereoscopic Company. The *embarras des richesses* of objects of interest was never greater, and would have been almost oppressive but for the opportunity of pleasant, genial converse afforded in the reception-rooms, and (*inter pocula*) in the refreshment apartment.

THE HUNTERIAN MUSEUM.

THE annual display of new preparations added to the Museum of the Royal College of Surgeons of England has taken place during the past week, and will be continued for a few days longer in order that it may be inspected by the Fellows and Members of the College. Eighty-eight pathological specimens have been added to the collection during the year, and their microscopical characters have been carefully described and delineated by Mr. Goodhart, the pathological assistant. The pathological collection has also been completely re-arranged, and now includes a number of specimens of diseases of the liver presented by Mr. Kiernan, the other chief contributors being Sir William Fergusson, Mr. Hilton, Mr. Hutchinson, Mr. Cooper Forster, and others.

The osteological collection has received the skeleton of the Berardius Arnuxii, an extremely rare whale, from New Zealand, which ran aground on the beach near New Brighton, Canterbury settlement, in 1868, and was preserved by Dr. Julius Haast, F.R.S., the curator of the Museum of Christchurch. This valuable skeleton was secured for the College by the liberality of Mr. Erasmus Wilson. The skeletons of two Tasmanian aborigines have been presented by Mr. Morton Allport, of Hobart Town; and the Smithsonian Institution of Washington has liberally presented a large series of skulls and skeletons of North American mammals. The skeleton of a fine Porbeagle shark, taken near Rye last November, has been carefully articulated; and the skeleton of the hippopotamus formerly in Mr. Brookes's museum has been remounted with greater accuracy.

Mr. Flower has made great additions to the physiological collection, especially of specimens illustrating the organs of digestion, this subject having been selected by him for his Hunterian lectures on Comparative Anatomy and Physiology. Mr. Lowne has completed the revision of the teratological collection, the catalogue of which is being printed. The collection of calculi has received some valuable additions during the past year, and Mr. Erasmus Wilson has added twenty-five models to his dermatological collection, which has also been enriched by two models of elephantiasis of the scrotum, and its cure by operation, by M. Voillemier, of Paris. The collection of surgical instruments, ancient and modern, has been catalogued and arranged in a room adjoining the Eastern Museum, which has been fitted with appropriate cases. The additions to the collection during the year has been small, but will doubtless be increased now that a well-arranged series is exhibited.

ROWLEY REGIS AND SMALL-POX.

WE have already remarked on the fearful mortality from small-pox at Rowley Regis. It received further illustration and explanation at a meeting of the Dudley Board of Guardians last week. The Registrar of Rowley attended, and said that in the last twelve weeks, the first of which ended on May 1st, there were, respectively, 1, 2, 0, 4, 2, 10, 15, 7, 19, 35, 19, and 20 deaths—in all, 134 deaths in twelve weeks, in a population of about 20,000. There were only 4 adult deaths among the 134. Only 5 were returned as having been vaccinated, 80 as being unvaccinated. The Registrar, in reply to a question, said the people objected to vaccination, but he could not tell why. There is no small-pox hospital. Mr. Barrs read a letter from the Vicar of Rowley, to the effect that it was not necessary to build a small-pox hospital, except a very little one for the paupers. But 29 paupers have died of the disease since April 12th, only two of them having been vaccinated. Mr. Barrs distinguished himself further by his theological views of small-pox: "They had said a good deal about stamping it out, but it had been sent by Almighty God, and they could no more stamp it out than they could the thunder and lightning He sends. (Loud cries of dissent.) It was not an infectious disease; still, he believed vaccination would prevent it." It would have been much more devout if Mr. Barrs had credited the Almighty with sending vaccination, which, according to his own confession, prevents small-pox; and if he had charged himself and the Vicar, and other persons supposed to represent the intelligence and authority of Rowley Regis, with not taking the most obvious precautions for isolating the sick and protecting the well by vaccination. It is satisfactory to know that in Dudley and Tipton the new Vaccination Act is working well. Vaccination is even being done regularly at Rowley Regis, as it might have been before the 200 cases of small-pox occurred, if they had had better advisers than Mr. Barrs and the Vicar; but small-pox is acting the part of Herod, and killing the young children at such a rate that there will be few to vaccinate if it is not done quickly.

DR. PETTIGREW ON THE CIRCULATION.

IN his eighth lecture on "The Physiology of the Circulation in Plants, in the Lower Animals, and in Man," Dr. Pettigrew explained at considerable length the intimate relation which exists between the lungs and heart—the lungs circulating air and the heart blood. The lungs, he remarked, in their most rudimentary form, are mere sacs, walled off at an early period from the alimentary canal. They retain within certain limits the peculiar rhythmic movements which characterise the intestines. He compared the lungs to the hollow viscera as a class. In the water newt, the lungs consist of a pair of elongated sacs, which have no laminæ or folds in their interior. In the frog internal ridges make their appearance, these increasing the respiratory or aerating surface. In the crocodile and turtle the ridges multiply and divide the interior of the lungs into cells; the differentiation going on in the lungs of birds and of mammals until those structures present a honeycomb appearance. By this means the aerating surface is enormously augmented. The lungs of serpents maintain their original tubular form, each terminating in an air sac. The lungs of birds communicate with the interior of the bones, and with as many as fifteen air sacs. These sacs open and close rhythmically, and pass on relays of air at regular intervals. If the humeri or arm-bones of a bird be perforated, its trachea or windpipe may be tied without producing suffocation, respiration going on by the openings in the bones. The air sacs have vessels ramifying on their surface, so that a certain proportion of the blood is aerated in them, as in the lungs themselves. The lecturer drew attention to the arrangement of the great vessels in the reptile, bird, and mammal. He especially directed attention to the large number of valves found in the heart of the bird, several of these being composed of muscular fibres. He believes the complicated and highly differentiated valves occurring in the heart of the bird are necessitated by the very perfect and elaborate respiratory apparatus; capacious lungs and a vigorous circulation being required to maintain the temperature and the muscular energy of birds flying and diving. He described the circulation as it exists in the mammal, and contrasted it with that found in birds. He adverted to the pushing and pulling power exerted by the heart; the ventricles pushing when the auricles are pulling, and *vice versâ*, and gave it as his opinion that, so long as the vessels are full of blood, collapse of their walls is impossible, fluids being very slightly compressible. He contended that, under these circumstances, a sucking power might be exerted either by the auricles or ventricles. He illustrated this by a very simple experiment. He took a large vessel with thin walls and fixed an ordinary syringe at either end of it. This done, he filled the vessel and one of the syringes comfortably with fluid, the other syringe being empty. The one syringe, he observed, represented the right ventricle, the other the right auricle. When the syringe representing the right ventricle was made to discharge its contents into the vessel, that representing the right auricle was made to draw into its interior a corresponding amount; the fluid being transferred from the one syringe to the other without in the slightest degree altering the calibre of the vessel. It is simply a question of supply and demand, and if the supply equals the demand, the vessel may be as thin as tissue-paper and yet have no tendency to collapse. This is precisely what happens in the heart and bloodvessels. The quantity of blood in the vessels of the body is nearly always exactly the same. The cavities of the heart are of the same size, and when the one closes the other opens. The blood ejected by the ventricles makes the circle of the lungs and the body and is received by the auricles, so that the blood is passed on in relays and according to measure. There is therefore no possibility either of confusion or accident. The lecture was illustrated by a large number of diagrams and by specimens.

DEATH IN LIVERPOOL SEWERS.

AN inquest has been held on the body of Lemuel Evans, who was suffocated while working in a sewer attached to the Sewage Utilisation Company's Works, Commercial-road, Sandhills. The jury found "that the deceased came to his death through being suffocated by noxious gases in the tunnel where he was working." They further represented that the question whether the sulphuretted hydrogen arose from sewage or from chemical refuse was of grave importance to the authorities. We agree with the jury, that this is a very serious question, not only for the inhabitants of the neighbourhood, but for the men on the sewerage works, who should have every protection that they can have from a careful and scientific supervision of the works—a point which does not seem to have been sufficiently attended to here. This fatal accident, which we have no doubt was due to sewage gases given off from huge accumulations of old sewer deposits, is the more suggestive of blame somewhere, as one life had already been lost in the same place a year or two ago. The jury properly remarked, that it does not appear that any competent person examined the works in the morning previous

to the men going down, or that ropes were provided to facilitate escape in cases of emergency. The precautions were obviously insufficient, especially after the warning supplied by the previous death. The accident has still further significance from the fact that the only outlet for the emanations from the tunnel is through the Sandhill sewers, which sewers are in a poor and densely populated district. If consideration for the population that live over the sewers does not suffice to induce the authorities to keep them more clear of accumulations, this course may be forced on them by the evidently growing indisposition of good workmen to work in these subterranean ways on account of their foulness. The moral of this accident is threefold —more ventilation, more labourers, with more frequent and careful supervision by skilled persons.

THE FIRST STAGES OF THE DEVELOPMENT OF THE OVA OF THE COMMON TROUT (SALMO FARIO).

DR. KLEIN states that the fertilised egg of the trout exhibits under the microscope up to the sixth hour a nearly uniform aspect. The egg appears as a dull globe enveloped in a thick vitelline membrane, and exhibits irregularly-distributed fat-like globules. The earliest period at which he has been able to perceive an indication of the blastoderm is five hours and forty-five minutes, when it appears as a small, more opaque, irregularly-outlined spot, around which the fat-globules have accumulated. At the tenth hour the blastoderm is elevated into a little mound lying in a saucer-like depression of the yelk. Soon after it presents slow amœboid movements. A median furrow then appears, which some hours later is crossed by one at right angles. These two furrows are visible at the end of the first day. At the end of the second day the surface of the blastoderm is so divided by furrows as to exhibit eight knobs, but after this the arrangement of the knobs or of the intervening furrows is irregular. Segmentation of the blastoderm into a mulberry mass is completed in nine days at shortest. In regard to the expansion of the blastoderm on the saucer-like depression of the yelk; in regard to the large elements which are to be found on the bottom of the segmentation cavity; the growth of the blastoderm round the yelk-globe like a cap, the peripheral part of which is thickened; and in regard to the foundation of the embryo at the peripheral thickening, he has but little to add to the account given by Stricker in Max Schultze's *Archiv*, vol. v. Dr. Klein considers the large elements at the base of the segmentation-cavity to be products of the blastoderm; that is, they are left behind upon the saucer-like depression of the yelk as the blastoderm is lifted from the yelk. The first trace of the embryo is a knob-shaped prominence, which slopes towards the centre at one spot of the peripheral thickening at about the fifteenth or sixteenth day after fecundation. On the following day this prominence projects still further inwards, and the internal or what afterwards becomes the cephalic extremity stretches like a cord towards the centre of the germinal area. The first indication of a dorsal groove appears at the cephalic third of the embryonal elevation, and from the sides of the latter, where the groove is deepest, two cords run forward to the centre of the germinal area, and meet over the cephalic extremity of the embryo, forming what he calls the secondary elevation. On the twentieth day the blastoderm has grown round the yelk so far that a portion of the yelk no larger than the head of a pin is exposed. On the following day the blastoderm has grown completely round the yelk. We cannot therefore speak of the existence of an opening which subsequently becomes the anus, as Stricker and Rusconi have done.

THE MEDICAL TRAINING OF WOMEN IN RUSSIA.

AT a recent public examination of the students of the school of midwives attached to the Kalnikine Hospital in St. Petersburg, Dr. Kozlow took occasion to offer some observations on the medical training of women. Twenty pupils of the school were examined, the examination being conducted by the professors of the school, some of the spectators present taking part in it; and the result appears to have been highly satisfactory, all the pupils without exception answering well the questions put to them. After the examination was concluded, Dr. Kozlow stated that he was of opinion that the training of women to practise medicine would not only prove of great utility in respect of the treatment of ailments amongst women and children, but would also be a great gain to the male practitioner in medicine. The latter, too commonly overwhelmed with work, and unable to devote the time which he could desire to scientific studies, would, by the encouragement of female practitioners of medicine, be relieved from some portion of his onerous labours, and thus would gain opportunity for study. We question whether this novel view of the benefit to male practitioners of physic to be obtained from the encouragement of female practitioners would be accepted in this country, and whether the labours of the great body of practitioners here are so onerous that they would be desirous to seek relief from them in the direction indicated by Dr. Kozlow. His observations were received with great applause by the audience; but notwithstanding the loudly expressed sympathy with Dr. Kozlow's views, Dr. Herwitz, the director of the Child-bearing Asylum, ventured to express his dissent from them. Dr. Herwitz boldly asserted that the intellectual development of women could never reach the level of that of men. Women had never produced a genius either in the sciences, or in art, or in painting, or in music! The incompetence of the American female practitioners in medicine, he averred, was proved by the fact that physicians (of the male sex) refused to meet them in consultation. To this attack Dr. Kozlow responded that, in regard to medicine, American female practitioners could not justly be cited; but he would point to Sweden, where females had now practised medicine with the greatest success for fifteen years. Dr. Kozlow, in fact, seems to have exaggerated his subject in one direction; Dr. Herwitz in the other.

"JONATHAN."

THE vocabulary of adulteration has lately been reinforced by another term,—coming, this time, from the people who claim the invention of wooden nutmegs and clocks that refuse to register the diurnal revolution of the earth on its axis. Only the sign, however, has been borrowed; the thing signified being, we regret to say, of purely British manufacture. A miller near Stockton was fined the other day for having in his possession sixty-three sacks of a commodity supposed to be sawdust for the adulteration of meal. Under the name of "Jonathan," this article, it seems, is largely employed in the north for mixing with the farinaceous food so much in request there—oatmeal, barley-meal, and Indian-meal being habitually adulterated with it. In evidence the analyst could not say with certainty that "Jonathan" was powdered wood; but this much he was sure of—that it was "woody." Every physiologist knows that man is unable to digest ligneous fibre or the harder kinds of cellulose; nay, it is doubtful whether he can digest cellulose at all. To adulterate with such matter a food which is largely consumed by the labouring poor, and particularly by the children, is one of the most scandalous offences that can be committed against society. The dyspepsia among

the adult, the convulsions among the infantile, population of northern England are in some measure explained as to their frequency and intensity by the unwitting use of a "spurious imitation," for the manufacture and vending of which the perpetrator was fined in the heavy sum of forty shillings! A more appropriate penalty would have been to diet the producer of "Jonathan" for ten days upon his own product, and to make him wash it down with copious libations of "Simpson."

THE GERMAN MEDICAL OFFICERS IN THE LATE WAR.

THE *Gaz. des Hôp.* (May 14th, 1872) contains the report of a committee appointed by the Medical Society of Paris in August, 1871, to inquire whether the acts of German medical officers during the war justified the expulsion of German members from the Society. The committee were to conduct their labours under the four following heads:—1. Professional bearing towards their French brethren. 2. Conduct towards the French wounded. 3. Professional conduct. 4. Behaviour towards the French population at large.

On the first head the Germans were declared at fault both before and after the war. On the second the charges are very heavy, the German medical officers being accused of positive cruelty towards the wounded French soldiers. On the third head the German medical men are accused of having consented to act as spies under cover of the Geneva Convention, and of having grasped at the office of examiners of prostitutes, and sought remuneration for the same in the occupied cities. Fourthly, and lastly, they are alleged to have committed the most revolting acts towards the population at large—stealing of horses, ill-treatment of women and children, and breaking into houses for the seizure of rare books and manuscripts.

The committee state that they are in possession of proofs and the names of witnesses; but that they withhold them for fear of reprisals as long as the German occupation of France shall last. They, however, propose to the Society—(1) To protest against the conduct of German medical men during the war of 1870-71; (2) to return thanks to the secretaries of the committee and to the journals (*Gaz. des Hôp.* and *Un. Méd.*), who have lent their services; (3) to publish an abstract of the report; (4) to place one copy of the latter, and the documents relating to it, in the archives of the Society, and another in the hands of the secretaries. These proposals were unanimously adopted.

The *Allg. Med. Cent. Zeit.* of Berlin (May 25th, 1872) gives insertion to the above report, and remarks that the latter is composed of a mass of calumnious statements, and that those accused will probably scorn to attempt a justification, and should leave the decision of the matter to their professional brethren of other nations.

THE NEW SWINDON HOSPITAL.

ALTHOUGH ample provisions were made for securing to the *employés* on the Great Western Railway, at the New Swindon works, all necessary medical attendance and medicines, it is only recently that a hospital has been provided for the maimed and wounded. For a long time the only dispensary was at the residence of Mr. Swinhoe, who with three other medical men and two dispensers devoted their time to the medical and surgical wants of the workmen and their families. The need for something in the shape of an institution of a public character may be readily gathered from the fact that the daily attendance ranges from 500 to 1000 persons, the numbers counted on an ordinary day last winter being 758. The Medical Fund Committee have provided baths—swimming, washing, and Turkish; and they have now added a small but very complete and well-arranged hospital, which is situated in the most open part of New Swindon, at the back of the market-place. This hospital is designed exclusively for accidents which may happen to any of the Company's servants, or for surgical operations when deemed expedient by the Medical Fund surgeon; but general diseases are not admitted.

While on this subject it may not be out of place to refer to the "Medical Fund," the Committee of which has the control of the hospital, the baths, and the sanitary arrangements of the town generally. The Committee also visit the railway company's cottages, and report on their condition to the railway officials. Altogether things appear to be uncommonly well managed at New Swindon, at any rate as far as medical and sanitary matters are concerned.

DR. LIVINGSTONE.

GREATLY as we rejoice to learn, on the authority of Mr. Stanley, that the eminent missionary explorer is "in remarkably good health, stout, and strong, quite undismayed by all he has gone through, and eager only to finish the task he has imposed upon himself," we confess to a feeling of misgiving when we are also told that he is about to undertake the solution of two more problems in connexion with the Nile. Eighteen months (or, as Mr. Stanley thinks, a much longer time) are to be devoted by the doctor to the task—first, of completely exploring the 180 miles lying between the spot where he was compelled to turn back and the region already traced; and, second, of testing the truth of a report respecting four fountains, which he has been told supply a large volume of water to the Lualaba. Correct information as to these matters is, of course, to be desired; but we think it may be purchased at too heavy a cost. The risk already incurred by Dr. Livingstone has been too great, and the anxiety as to his welfare too intense, to admit of our contemplating a renewal of the experience with equanimity. Why, we ask again, and several of our contemporaries are echoing the question, does not the doctor return, and leave further exploration, with its hair-breadth escapes and desperate situations, to the younger spirits who went out in search of him, and who are, no doubt, disappointed at finding their task so soon over?

NUNEATON.

THE General Sewage and Manure Company have inaugurated their new works at Nuneaton. Dr. Anderson, of Coventry, delivered an address on the occasion, giving an account of his process. Shale is treated with sulphuric acid with the result of producing an impure alum. This is mixed with the sewage, and lime is subsequently added. A flocculent precipitate is formed, which is collected and dried. Dr. Anderson's chief discovery is the method of utilising shale in the manufacture of the alum. Four days are required to complete the process of sewage-manure manufacture, but after the addition of the alum the water was described as clean, and the subsidence of the solid matter complete. We wish the gentlemen joy of the drinking of the sewage so purified, for even Dr. Anderson admits that the urea remains unaltered. Dr. Anderson was exceedingly eloquent on the objections to irrigation, but he seems beset with the difficulties which have hitherto proved insurmountable to the advocates of chemical processes. Nothing is easier than to cause a separation of the solid matters of sewage, but nothing harder than to secure adequate purification of the effluent water. Nothing is easier than to collect the solids, but nothing harder than to dry them, or

prove their value as manure. Of course, Dr. Anderson hopes to overcome these difficulties, and we trust, for the sake of the investors and the public, that his endeavours may be successful.

THE NAVAL MEDICAL SERVICE.

THE University of Dublin, on Wednesday, the 26th ult., conferred the honorary degree of LL.D. on Sir Alexander Armstrong, K.C.B., Director-General of the Medical Department of the Navy. The Doctorate of Laws of Dublin corresponds to the D.C.L. of Oxford and Cambridge, and being the highest honour the University has at its disposal, its possession is therefore the more gratifying to the recipient. Sir A. Armstrong, though a graduate in medicine of Edinburgh, was a student of Trinity College, Dublin, for a time.

The next examination of naval assistant-surgeons desiring to qualify for the rank of surgeon will be held at Haslar and Plymouth Naval Hospitals on the 16th inst., and not at Somerset House as heretofore; and gentlemen desiring to appear are required to give notice to the Inspector-General at either hospital.

SMALL-POX RAVAGES.

ACCORDING to the report of the medical officer, 210 cases of small-pox were under treatment in Dudley at the end of May. This is not bad for a town of 82,247 people. The deaths from this disease were double those of the previous month—viz., 40. The friends of small-pox, though they admit it to be a disease, say it serves as a substitute for other diseases more serious than itself, and is infinitely preferable to that dreadful disease, vaccination. But in Dudley the number of deaths from all causes is large—viz., 134, being an increase of 38 upon the previous month. If all the mortality that ever happened in this country from vaccination, since its introduction by Jenner, could be gathered together, it would probably not amount to half or quarter of that from small-pox in one month in Dudley. The Rowley Board continues to have an increase of small-pox on its hands, and to take the responsibilities with that serenity upon which we have already remarked. Out of 26 deaths 20 were from small-pox. One of the guardians of the Dudley board explained that the Rowley people wished to be economical, but truly remarked that it was possible to carry that doctrine too far. They will find small-pox the costliest thing they have had to do with for a long time.

REFRIGERATION.

ONCE and again have we urged the importance of supplying the poor in hot weather with cooling beverages. Refrigeration of the system, rather than slaking of the thirst, is the general desire in the dog-days, from the humble inmate of the sweltering alley to the luxurious pic-nic party. Rather than imbibe the semi-tepid fluid from the pump, the poor man will deny himself other necessaries to purchase coolness in the gin and iced water so temptingly held out to him by the publican. Drinking-fountains are all very well; but if their philanthropic donors would impart coolness to them in hot weather, the boon would be infinitely greater to those for whom they are specially designed. Wenham Lake, or rather Norwegian, ice is not such an expensive commodity as to render its gratuitous addition to the drinking-fountain a very serious consideration. So fortified against the

Flagrantis atrox hora Canicule,

the poor would drink not only less gin or beer, but less water—a not unimportant matter, when Rotherhithe is agape for thirst, and Bermondsey panting, like as the hart, for water-brooks.

THE AUTUMN MANŒUVRES.

IT is understood that the force to be employed in the forthcoming autumn manœuvres will consist of two *corps d'armée*, each composed of two divisions. The medical and field hospital arrangements will be much the same as last year. Inspector-General Fraser, the principal medical officer at Aldershot, and Deputy-Inspector-General Dr. Fogo will probably be the officers charged with carrying out these arrangements. Previous experience has shown that the troops are more healthy on such occasions than when located in garrison or standing camps; but the amount of sickness, although the diseases may be of a trivial kind, depends very much upon the nature of the weather. If the weather is fine soldiers enjoy the open-air life and carefully avoid hospitals. It requires the excitement of a real campaign, however, to keep men in health and spirits during wet weather.

A NEW COTTAGE HOSPITAL.

THE town of Wisbeach, in the Isle of Ely, will be shortly provided with a cottage hospital, which will be endowed by Miss Trafford Southwell with £3000, by Mr. Peckover with £2000, and by Mr. Algernon Peckover with £500. The hospital will contain sixteen beds, and it is very properly arranged that four out of a managing committee of eight shall be medical men. The style of the future hospital is described by the architect as "domestic Gothic." Whatever that may be, we take leave to record a protest against any description of Gothic whatsoever as unfit, on hygienic grounds, for a hospital, and recommend the managing committee to scrutinise the plans and designs of their architect very narrowly before either are finally adopted. The remarks of Mr. Galton in his admirable work on "Construction of Hospitals" apply with tenfold force to these cottage institutions, and, in conclusion, he says: "The architecture should be an expression of the need, and nothing more. Any sacrifice of sanitary requirement to architectural features is wrong; it adds uselessly to the cost. Ornament means too frequently the creation of corners and projections, which delay and stagnate the air, and form receptacles for dirt; it means outlay and continual cost in repair."

POOR-LAW WORK AND PAY.

SOME generous and reasonable words are spoken in the *Hastings and St. Leonards Observer* of June 29th in favour of an application for an increase of salary made by the medical officer of No. 1 district of the Hastings Union. The writer says:—

"I find that he is paid a salary of £150 a year. That for that sum, during the year 1871, he paid 2612 visits at the patients' own houses, received 1752 patients at his own surgery, and supplied in all 5620 bottles of medicine. Taking a fair proportion of this, how much does the intelligent reader think the medical officer was paid for each bottle of medicine he dispensed? Just *one penny three farthings!* What will our well-to-do readers who pay their guinea for the written prescription to the physician think of this? or what will the working man, who pays his medical attendant half-a-crown a bottle for his medicine, think of it? The very compounder of the drugs will charge us 1*s.* 6*d.* or 2*s.* for a bottle of medicine, but a skilful medical attendant is allowed just *one penny three farthings* for each bottle he dispenses! These pitiful facts need no further comment."

If it is the duty of guardians to provide skilled advice for the poor, it is certainly their duty, and not less their wisdom, to pay such salaries as have some proportion to the service required. At the same time, the doctor should be relieved of all dispensing duties.

DEATH FROM ONE GRAIN OF MORPHIA.

A LADY at Morecambe has died from taking a pill containing one grain of morphia. The chemist misunderstood the prescription of Mr. Metcalfe Johnson, of Lancaster, and gave six pills with a grain in each, instead of dividing the grain into six pills. The patient, afflicted with large abdominal tumours weighing between thirty and forty pounds, and with dropsy, died in less than twelve hours, in spite of galvanism and various other means. Mr. Johnson appears to have omitted the word "divide" from the prescription, which certainly should not have been omitted. On the other hand, a chemist should not make up pills with so large a dose of morphia in each without satisfying himself that he is rightly construing the intentions of the prescriber. We must demur to a statement reported to have been made by Mr. Johnson, that a grain of morphia would not kill a healthy person. The dose would be a dangerous one, and its effect would depend, not on healthiness, but on susceptibility to the action of the drug.

THE PORTSEA ISLAND BOARD AND THEIR MEDICAL OFFICERS.

THE above board has called upon two of its medical officers to resign. We have read the proceedings of the board as reported in the *Hampshire Telegraph*, so far as they refer to the case of Mr. Gilmour, and we cannot say that the evidence adduced justifies the extreme course taken by the guardians. Mr. Gilmour (accused of neglecting to see a child) says he forgot to put the child's name on his list. This of course was very wrong, but it was not very unnatural considering the work given Poor-law medical men to do. By the way, the child's father had been twenty years in the employment of one of the guardians, and was at the time so employed. Was this a proper case to burden the parish doctor's list with? Be this as it may, a Poor-law medical man may be guilty of a want of memory. But this is not an unpardonable sin, or one that should be punished with a demand to resign. The other charge is more serious; but it is flatly denied by Mr. Gilmour, and should only be believed on very explicit testimony.

THE FEEDING OF INSANE PATIENTS.

THE annual report of Dr. Hitchman, the medical superintendent of the Derby County Asylum, who, we perceive, has resigned the post that he has held at that institution for upwards of twenty-one years, makes special reference to a method of feeding lunatic patients, which was first introduced to the profession in the columns of THE LANCET of March 20th, 1869, by Dr. Moxey. The difficulties and even dangers attending the forcible administration of food to patients are well known. Dr. Moxey's method of pouring milk and other nutritious fluids along the floor of the nostril is said to have proved very safe and effective, and easy of accomplishment. During the past year, 59 male and 68 female patients were admitted into the asylum. Dr. Hitchman states that the number of admissions has been large during the last three years.

HIGH-HANDED TREATMENT OF A DISPENSARY DOCTOR IN IRELAND.

VARIOUS illustrations will be found in our impression today of the fact that it is no light matter to hold Poor-law appointments. Dr. Colman, of the Clonbror Dispensary, at a recent meeting of the committee of management, sent a letter intimating that he had received a sealed order of dismissal from the Poor-law Commissioners without any statement of reasons and without being afforded any opportunity of giving explanations. We are glad to be able to add that the committee of management unanimously adopted a resolution requesting the Commissioners to rescind the sealed order. This is a piece of despotism that should be exposed in Parliament if it be persisted in by the Poor-law authorities.

DR. LUSH, M.P.

WE are happy to say that Dr. Lush has now nearly recovered from the effects of the accident which befell him last week, in being thrown out of a Hansom cab in Parliament-street. Our profession is not so strongly represented in Parliament as it ought to be; and it is therefore with more than ordinary pleasure that we announce that Dr. Lush is again able to be in his place in the House of Commons, from which, in the interests of the profession, he could be ill spared.

MEDICAL stations for the ready assistance of persons wounded or taken suddenly ill have just been established in Berlin. Six medical men and three well-trained attendants are appointed to each station. Two doctors and one attendant are alternately on duty every night. The stations are fitted up in such a manner that the sick or wounded can be attended to until the conveyance designed for the purpose takes them to their homes or to the hospital. Instruments, medicines, and the necessary apparatus for emergencies are in readiness, and the place is distinguished by a gas-lamp with a large red cross.

Two men have died in Middlesborough after unloading a cargo of nitre-cakes. Mr. Hudson, a chemist, stated that the nitre-cake had evidently not been properly manufactured, and had evolved nitrous-acid gas. A verdict corresponding to this opinion was passed. The Town Clerk, who watched the inquiry on behalf of the corporation, intimated that a public analyst had been appointed, and that any workman who suspected substances to be injurious might have them analysed.

IN spite of the intense heat, Paris was healthier last week than during the preceding one, the deaths on the 28th ult. being 689, or 72 less than on the 21st. Except under the head of scarlatina, which showed a slight increase, there was a diminution in the mortality from all diseases. One case of cholera (not Asiatic) occurred, while 140 deaths are classified under the pulmonary group.

THE heat continues to be exceptionally great in India. At Allahabad, by the latest accounts, it had reached 115° in the shade, while at Hyderabad it was 116°, and had caused the death of one officer, four men, and twelve children among the 16th Lancers. Most of the wells around Poona are said to be dried up, and great scarcity of water is felt in many places.

AT an inquest held at Ipswich last week on the body of a youth who had been drowned, the surgeon, Mr. G. S. Elliston, made the very sensible recommendation that printed instructions for restoring the apparently drowned should be distributed along the banks of our rivers. This timely suggestion, if adopted, will probably be the means of saving many lives.

MR. DAVIS, the sculptor, has completed a bust of Dr. B. W. Richardson, F.R.S. The likeness is admirable, and we trust that copies will be taken of it—say by the autotype process,—so as to place within the reach of the profession the representation of one to whom medical science is under so many obligations.

THE Vice-chancellor and Proctors of the University of Oxford have nominated Dr. Acland, Regius Professor of Medicine, and Dr. Rolleston, Linacre Professor of Physiology, to represent the University on the Committee of Reference for the Medical Examining Board for England.

MEASLES has for some time past been very prevalent among the troops in different parts of England and Ireland. At Aldershot the cases have been and still are very numerous, but the mortality, happily, has been insignificant.

THE intelligence by the last mail from the Mauritius is not very reassuring. Fever and diseases of a malarious type were very prevalent, and attacks of the former disease had become more frequent among the European troops stationed in the command.

THE *New York Tribune* of the 19th ult. has a very alarming and ambiguous telegram, stating that a severe epidemic of some kind has appeared in the western towns of Brazil. In one place 8000 persons out of a population of 13,000 are reported to have died.

FROM the commencement of the present year there have been thirty-five admissions and twenty-three deaths from cholera among the European troops serving in the Bengal Presidency.

AT a recent inquest in St. Pancras on the body of a murdered child, Dr. Lankester strongly pointed out the necessity of more efficient legislation for the protection of infant life.

CHOLERA and dengue fever are reported to be spreading in India; several cases of the former have occurred among the women and children of the 49th Regiment at Mhow.

MR. JEFFERSON, the American actor, whose impersonation of Rip Van Winkle is so well known, was lately successfully operated upon for an ophthalmic affection.

Correspondence.

"Audi alteram partem."

ON THE MEMBRANA DECIDUA IN TUBAL GESTATION.

To the Editor of THE LANCET.

SIR,—On June 28th, 1872, Dr. Paul Munde, Master in Obstetrics of the University of Vienna, late assistant to Professor v. Scanzoni at Wurtsburg, Bavaria, U.S. America, called upon me, and requested to know whether in any of my papers on the membrana decidua which surrounds the ovum in cases of tubal gestation I had described the decidua reflexa. My impression was that I had done so; but I requested Dr. Munde not to state this as a fact until I had leisure to refresh my memory by referring to the Medico-Chirurgical Transactions, vol. xli., in which one of the papers was published. At page 145 is the following description of an ovum in which both decidua vera and reflexa and a decidual cavity were observed:—

"Case 6.—Mr. Jackson, of Wimpole-street, presented to me in 1856 the uterus and appendages of a woman who had died suddenly from internal uterine hæmorrhage at an early period of pregnancy. The preparation of the parts is now placed on the table of the Society. It will be seen that the uterus is enlarged, and the whole lining membrane is coated with a thick, irregular layer of a substance resembling the fibrine of the blood, of a red colour in the upper part. This substance has been partially detached from the lining membrane of the uterus, which presents a natural appearance. When the preparation came into my possession the right Fallopian tube, about the middle, was as large as a walnut, or larger where its coats had burst, and a coagulum of blood was hanging through the irregular aperture. The tube was pervious from the corpus fimbriatum to the dilated part. On cutting open this expanded portion, a small embryo, enclosed in the amnion, was observed, and the vesicula umbilicalis, remarkably large, with its peduncle, came into view. All the cells of the placenta, and all villi of the chorion, were seen distended with coagulated blood, and surrounded with deciduous membrane, a great part of which had been separated from the inner surface of the tube. By a careful dissection subsequently made, the decidua was found to consist of placental decidua, decidua vera and reflexa, with a decidual cavity. The ovum in this case of tubal gestation was, therefore, perfect in all its structures, and similar in every respect to ova which had reached the cavity of the uterus, and been developed there until the end of the second month."

I am, Sir, your obedient servant,

Savile-row, June 28th, 1872. ROBERT LEE.

THE POWER OF UNION MEDICAL OFFICERS TO SIGN CERTIFICATES OF LUNACY.

To the Editor of THE LANCET.

SIR,—I think the following narrative may be interesting to all district medical officers under the Poor Law, and possibly the medical profession generally:—

I am medical officer of No. 8 district St. Pancras, and on Friday last, June 21st, I gave notice to the relieving officer that Mrs. O——, of Compton-street, was a lunatic under no proper control, and requiring to be removed to a lunatic asylum.

On Monday, January 24th, I received a note from the relieving officer, a copy of which I subjoin:—

"Mr. Wadeson, J. P., will meet you to-morrow, Tuesday morning, at ten A.M., at —, Compton-street, to see Mrs. O——."

In accordance with this instruction I went to —, Compton-street, this morning, Tuesday, at ten o'clock. In a few minutes Mr. Wadeson, J. P., arrived, bringing with him another medical man, Mr. H. Statham, of Woburn-place. Mr. Wadeson acknowledged that he had authorised the relieving officer to instruct me to meet him at ten o'clock, for the purpose of examining Mrs. O——. Mr. W. proceeded to say that he afterwards more attentively read the Pauper Lunatics Act, and that he came to the opinion that the certificate of a district medical officer was not sufficient for the removal of a pauper lunatic, and that a district medical officer signing such a certificate would not receive any fee. He had, therefore, thought proper to bring with him a duly qualified medical man unconnected with the Poor Law. I assured Mr. Wadeson that I had an experience of twenty years as district medical officer, and that such officers were not prohibited, or in any way disqualified, from signing certificates for the removal of pauper lunatics. To which Mr. W. curtly replied, that he should read the Act as he thought proper, and abide by his own reading, and that he would not permit anything further to be said on the subject. This, of course, admitted of no reply, and I left the room.

I then consulted the Pauper Lunatics Act, 16 and 17 Vict., and I found chapter 97, sect. 98, containing all directions respecting certificates of lunacy for paupers, and at the end of the chapter is the following:—"Note—Medical officers of unions or parishes are no longer prohibited from signing certificates in the case of pauper lunatics belonging thereto." You will perceive, Sir, from this extract that Mr. Wadeson was mistaken when he said that district medical officers were legally incompetent to sign lunacy certificates for paupers.

I venture to think that if Mr. Wadeson is a gentleman as well as a justice of the peace, it would have been more becoming on his part, after finding out, as he supposed, that he had made a mistake in directing me to meet him, if he had written immediately to prevent my attendance; but that is an amount of consideration which a justice of the peace could scarcely be expected to display to the parish doctor.

It is, however, positively untrue that any such legal disability exists, and, so far as I can see, Mr. Wadeson has no excuse whatever for a gratuitous insult offered to me individually, and through me to the district medical officers of the metropolis.

I do not know whether I have any legal remedy against Mr. Wadeson, but my impression is that I can sue him in the County Court for loss of time during my journey to Compton-street, &c. Perhaps some of your readers will be kind enough to advise on that point.

I am, Sir, yours obediently,

THOMAS MASSEY HARDING, F.R.C.S.

Gray's Inn-road, June 25, 1872.

THE PUBLIC HEALTH BILL.

To the Editor of THE LANCET.

SIR,—The alternative offered to Poor-law medical officers by Dr. Rumsey's letter is quite a gratuitous one. I mean that no such alternative is offered by the Bill itself. His first proposition expresses, in a tone of disparagement, what the Bill really offers to Poor-law medical officers; his second proposition expresses, in a tone of elevated confidence, what he himself would like the Bill to have offered. Dr. Rumsey would counsel Poor-law medical officers to withhold all support to the first proposition, and to adopt the policy enunciated by his second proposition; or, in other words, to take up a policy, not of support and gratitude for what is really offered, but a policy of agitation for something that is not offered, but which Dr. Rumsey thinks ought to have been offered by the Bill.

As to "being constituted in town and country alike deputy officers of health," the 11th clause sufficiently shows that there was no such intention on the part of the authors of the Bill, but, on the contrary, that they expressly avoided for the present the crushing opposition to the Bill which would have followed its extension to towns.

Agitation, then, for what has been expressly and avowedly left out of the Bill, would appear to most minds a fruitless waste of time. In the thirteenth clause we have the importance of the Poor-law medical service, in sanitary work, honourably recognised; and we have a real improvement in the status of all rural medical officers. Here, then, the Bill emphatically claims a policy, not of blind agitation, but of gratitude and support on the part of our Association. Lastly, I would merely remark that my experience of Poor-law medical officers would lead me to expect that all duties arising from their appointments, as sole medical officers of health in their respective districts, would be discharged in a fearless, upright, and honourable manner, and that they would stand in no need of the purifying influences of Dr. Rumsey's "principal officer of health," who, he most condescendingly tells us, "would be ready at all times to support you, and to relieve you from the disagreeable duty of initiating proceedings against nuisances created by your private patients."

I am, Sir, yours truly,

July, 1872. J. WICKHAM BARNES.

OBLITERATION OF THE CONJUNCTIVAL SAC.

To the Editor of THE LANCET.

SIR,—Mr. Carter inquires what becomes of the tears after obliteration of the conjunctival sac; if the lacrymal gland would not be a source of considerable trouble? Perhaps there may be cases in which this will be found to be the case, and that the conjunctival sac cannot be destroyed whilst the lacrymal gland is left; but I can only say that in the (few) cases in which, as yet, I have ventured to destroy the conjunctiva altogether, I have not found this after-complication to arise.

For my own part I doubt very much if at most times and in a general way the lacrymal gland is so active a body as it is supposed to be, or that it has so much to do in secretion as is generally believed.

In an introductory paragraph to my present notes I have invited the personal experience of others in some few practical matters (of which the destruction of the conjunctival sac, in some cases, is one), in which I have made some innovations on the established rules of eye-surgery. I wish to correct myself by the corrections of others, and if among them, Mr. Carter, especially, will essay the practice of destroying the conjunctival sac, I shall be very glad to have elicited his practical opinion, and to have the benefit of his sound judgment. My rules are only intended to express my own present experience, *quantum valeat*, and not to be at all final or didactic, as of sufficient experience, of myself alone; and I would again claim the privilege of modifying them after my own greater experience and according to the determination of my ophthalmic brethren. That I may do this it is mainly that I have thus early published my partial experiences in this, as in some few other practical points worth consideration.

Your obedient servant,

Upper Brook-street, June, 1872. J. F. STREATFEILD.

THE MEDICAL CLUB.

To the Editor of THE LANCET.

SIR,—At the extraordinary general meeting held at the Club on the 30th of May last, it was unanimously resolved "to continue the Club on the proprietary principle." Captain Valpy (late of the 89th Regiment) having submitted a proposal to the meeting to become the future proprietor, negotiations have since been concluded with that gentleman, and on the 1st instant he undertook the responsibilities and liabilities of proprietor of the Medical Club.

Captain Valpy's experience in the commissariat and paymaster's department of the army for over nineteen years, and his having been a member of the Club for several years, will afford him very great facilities for further developing and improving the management of it.

Captain Valpy proposes to continue the Club as a "Medical Club," and to place it upon a new and enlarged basis, a copy of the details of which when completed will be forwarded to each member.

Your obedient servant,

LORY MARSH,

July 3rd, 1872. Late honorary secretary and treasurer.

THE APOTHECARIES' MONOPOLY.

To the Editor of THE LANCET.

SIR,—A decision was given the other day by a London magistrate which appears to me to be altogether adverse both to the meaning and spirit of the Medical Act of 1858, and raises anew the question which I considered the majority, if not the whole, of the medical profession regarded as settled—viz., whether a fair remuneration for advice and medicine can be recovered in courts of law by a medical practitioner holding a qualification in medicine and surgery. The case is briefly this:—Dr. M., who is a M.D. and C.M., sues a gentleman for £10 for advice and medicine. The defendant does not deny that he received advice and medicine, but the judge rules that the plaintiff cannot recover for medicine unless he is a licentiate of the Apothecaries' Company. Now, Sir, would you kindly say whether, in your opinion, this is the state of the law, and whether this ruling is in accordance with the Medical Act of 1858.

Yours, &c.,

London, June 20th, 1872. B. D.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

GENERAL indignation is felt in this town at the rejection of the Sewerage Bill by the House of Commons. The subject is to be brought before the Town Council at its next meeting, and special attention will be called to the fact that the majority of three, by whom the measure was rejected, was made up of votes of members—viz., Sir R. Peel, Sir C. B. Adderley, and Mr. Wingfield Baker—who, as owners of land proposed to be acquired by the Bill, and petitioning against it as such owners, were not qualified to vote on the question. It will be seen that this is rather a constitutional than a local question, and Parliament will be invited to give an expression of its opinion upon it.

Mr. Henley, the Local Government Board Inspector, has been praising the Board of Guardians for their energetic and satisfactory endeavours to cope with the recent small-pox epidemic. Praise from such a quarter is so rare that it is all the more acceptable when it does come. The fact that, of 122 cases in the town, 92 were to be found in the infirmary, shows that the inhabitants appreciate the importance of isolating the disease, and also feel confidence in the management and good conduct of the establishment. The mortality from this disease was only 4 last week, while in the three preceding weeks it had been 6, 7, and 8. From other epidemics the town is free, and the mortality for the quarter has only averaged 20·6 per 1000.

The annual meeting of the Birmingham Eye Hospital has been held. The report shows that 678 in-patients and 7878 out-patients have been attended to during the year, a considerable increase upon the numbers treated last year. The financial position is equally satisfactory: the subscriptions now yield annually £1203, as against £958 in 1868. The chairman expressed the regret of the committee at the death of Mr. Townsend, who had faithfully performed the duties of surgeon for twenty years. It transpired that the committee think of relinquishing their present building, which is situate in a central commanding position, and is therefore very valuable, and of removing the institution to some less expensive site. As it would be difficult to find a more commodious building in the centre of the town, where such a hospital should be, I do not see the advantage of the proposed change.

The hospitals are now somewhat bare of patients. At the General Hospital extensive changes are being made which will greatly enhance its value. The roof of the upper story is being raised several feet, and an entirely new operating theatre, which is well lighted and of ample proportions, is in course of construction.

Mr. Pemberton has recently had three cases of resection of the elbow-joint in patients aged respectively thirty-eight, forty-five, and forty-seven, and all have done well. He uses a single straight incision, applies a rectangular splint for one week after the operation, and at the end of a fortnight commences passive motion.

Mr. Goodall has performed Holt's operation with good results in a patient aged fifty-six, with organic stricture, and gives the preference to this method of treatment in many of his cases.

A good specimen of antiseptic treatment may be met with in a patient of Mr. Bartleet. She is a woman, aged sixty-five, who came in with strangulated femoral hernia of three days' standing. Mr. Bartleet divided the stricture without opening the peritoneum, and treated the case antiseptically. The wound healed in four days, and in ten she was in a fit state to leave the hospital. Mr. Baker's case of ovariotomy, to which I alluded in a former letter, has gone out cured.

A case of tetanus resulting from exposure to cold and wet, in a lad aged twenty, deserves mention. He had been five days ill, and, on admission, had tetanic spasms every few minutes. Dr. Wade ordered the ice-bag to be applied to the spine for some hours, and gave hydrate of chloral in thirty-grain doses every four hours. The spasms now only occur about three times a day, and the patient seems, at the end of ten days, in a fair way of recovery. The dose of chloral has been advanced to forty grains, three times each day, and each dose is said to cause tranquil sleep for several hours. Want of space compels me to defer my account of several cases of interest at the Queen's and Children's hospitals until my next letter.

Birmingham, July 2nd, 1872.

IRELAND.

(FROM OUR OWN CORRESPONDENT.)

THE honorary degree of Doctor of Law was conferred last week by the University of Dublin on Sir Alexander Armstrong, K.C.B., and Dr. Andrews, Vice-president of the Queen's College, Belfast. The University has done well in recognising the merit of two members of our profession who, all will acknowledge, are well worthy the honour they have obtained.

A new Infirmary for Diseases of the Eye and Ear was opened on Thursday last in this city. Dr. Jacob, lately attached to the Baggot-street Hospital, is the ophthalmic surgeon, Drs. Porter and Kennedy the consulting medical officers, and Dr. Cronyn, the consulting obstetrician. Those not paupers are supposed to pay a trifling amount to defray the cost of medicines, whilst private wards will be set apart at a weekly charge of £1 10s. It remains to be seen, however, whether the experiment will be successful, for there are already in Dublin two eye and ear hospitals, established for several years; and besides these there are also special ophthalmic wards in most of our general hospitals.

Dr. Cameron, Professor of Hygiene to the College of Surgeons, on Thursday last gave the fifth lecture of his course before a crowded and fashionable audience. The subject of the lecture was Water in relation to Health, and was illustrated by numerous diagrams, experiments, and microscopic demonstrations.

A decree was passed by the Senate of the University of Dublin on the 22nd ult. creating a new degree—viz., Bachelor in Surgery, the condition on which the degree is obtained being, that the candidate shall be a Bachelor of Arts, and shall have spent four years in the study of anatomy and surgery. The higher title of Master in Surgery is henceforth reserved for those who, being Bachelors of Surgery of three years' standing, shall deliver two public lectures on some branch of surgery before the Regius Professor, or who shall pass a special examination.

The Corporation of Cork are about to appoint a medical officer of health for that town, and it is to be hoped this appointment, by improving the sanitary condition of Cork, which is very bad, may cause a diminution in the mortality from small-pox. Indeed, the deaths there from small-pox have been extraordinarily numerous, no less than 187 persons having died within the last four weeks from the disease.

Dublin, July 2nd, 1872.

PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

THE election of M. Sédillot (the well-known surgeon of Strasburg) at the Academy of Sciences has been the great medical topic of the week here, and has caused not a little agitation in the circles of the profession. Perhaps you know that the Academy of Sciences here is made up of various sections, taking in all the branches of science. Now there is one section which until now had been devoted to Medicine and Surgery, and which at present includes Andral, Bouillaud, Nélaton, Larrey, Claude Bernard, and Cloquet. A vacancy having occurred in this section through the death of Professor Laugier, the well-known surgeon, several candidates, all physicians and surgeons of course, put in their claims to the seat, and began canvassing. But two members of the section, MM. Claude Bernard and Andral, working out the idea of a certain portion of the Academy, and availing themselves of the fact that among the candidates there was one exclusively devoted to the pursuit of pure physiological investigations, attempted to set aside all precedents and traditions in order to make of this section of medicine and surgery one exclusively destined for pure physiologists, and to exclude all practising physicians and surgeons from the Institute of France or Academy of Sciences. Of M. Claude Bernard, who has never handled a lancet or a stethoscope, and who holds by the reputation of being the French physiologist of the day, such a manner of thinking and of acting may be understood; but of M. Andral, who owes the better part of his reputation and position to his abilities as a clinician and to the results of his practice, it may be asked, *qu'allait-il faire dans cette galère?* and what business had he to turn round against his brother physicians and surgeons? Is it not strange to see two men belonging to the profession and faculty here striving to exclude from the Academy of Sciences men of practical and clinical knowledge, who in debates on all subjects touching upon medicine (and we all know the strict connexion of medicine and surgery with the sciences) can bring forward the light and experience of clinical experience, that judge *en dernier ressort* of all physiological researches? Though the two members I have mentioned, backed by a minority in the Academy, did their best, they

were fortunately defeated through the eloquent intervention and efforts of Nélaton, Larrey, Cloquet, and Bouillaud, and at the election M. Marey (a man of eminent worth whose only *tort* on this occasion—an involuntary one—was to have been pushed by the minority), got only 19 votes, whilst M. Sédillot was elected by 34.

Speaking of elections, I can scarcely omit to refer to the agitation caused by a recent ballot at the other Academy, that of Medicine, in electing a member in the section of Pathological Anatomy. Several candidates had sent in their claims, and amongst them M. Charcot, whose researches on the lesions of the nervous system, especially, have gained him such notoriety and eminence here. The members of the section alluded to, as is the custom, examined the titles of the candidates, and got up a list, in which the candidates were classified according to merit, and in which M. Charcot's name figured at the very bottom, after several names of distinguished but young workers, who have certainly not attained the fame of the physician of La Salpétrière. The Academy had agreed to elect M. Buerdon, Physician to the Hôtel Dieu, who stood at the head of the list, and who is a much older man than M. Charcot; but still the very hard way in which this latter candidate had been treated by the section awakened their susceptibilities, and brought forth a warm protest.

You are doubtless aware of the death of Adolphe Richard (surgeon to Beaujon), which occurred about a fortnight ago; but it is not too late to pay a last tribute of homage to the memory of this very distinguished surgeon and amiable man. He was the son of the illustrious Professor of Botany at the Faculty, Adolphe Richard the elder, whose lectures were among the most brilliant and successful that have ever been delivered at the Paris School of Medicine. The older generation of medical men here can never speak of Orfila's lectures on Toxicology, Bernard's lectures on Physiology, and Richard's upon Botany without going into fits of enthusiasm. Adolphe Richard the younger inherited his father's love of botany, and during his earlier professional days showed great proficiency in this study, and gave lectures at the Ecole Pratique, in which he exhibited some of his father's brilliant oratorical qualities. Surgery, however, soon became his favourite pursuit. He was successively appointed Aide d'Anatomie and vice to the Faculty and Surgeon to the Paris Hospitals. He had just got the appointment of Surgeon to the Beaujon Hospital, with one of the largest surgical practices in town, and had written the most important work of his life, "La Pratique Journalière de la Chirurgie" (a book which, notwithstanding its shortcomings, is fully worth the attention of every practical surgeon), when he showed signs of the erratic disease which was finally to carry him off—namely, softening of the brain. He was of a lively, refined, quick, and rather versatile disposition; well skilled in questions of art, science, and letters, and much liked by his numerous friends.

Obituary.

THOMAS GODDARD, J.P.

THIS gentleman died at Park Hall, near Longton, on the 14th day of June, in the eighty-first year of his age. He had actively followed the practice of his profession up to about three years ago, when declining strength compelled him to leave all arduous work to younger hands, but up to a few months of his decease he visited now and then some of his old friends and patients. He was born at New Mills, in Derbyshire, where he received a liberal education, and after an apprenticeship of five years, and two or three years spent at the London Hospital, he settled at Longton in 1814, where by his skill, energy, and constant application to work he soon became the leading practitioner.

He was never a very strong man, and for the last fifty years of his life suffered much from bronchitis, but, being naturally very abstemious, struggled with his enemy in a way that few men could do. He firmly believed that abstemious living had on several occasions saved his life, and often related the fact that the only winter for nearly fifty years he had escaped bronchitis was one during the whole of which he never tasted animal food or intoxicating drink of any kind, living chiefly on oatmeal, potatoes, and milk, and this at a time when the work he had to perform was gigantic and constant by night and day.

He was to the last a believer in bleeding, and forty years ago, being called in consultation to a gentleman in his eightieth year, who was suffering from violent epistaxis, and who frequently did so, which all the usual remedies had failed to relieve, he bled him freely from the arm, and was rewarded by a cessation of the epistaxis, which never returned, although the patient lived for five or six years afterwards. There is one incident in his life worthy of being recorded as an example of his spirit and determination to obtain knowledge at any cost. Many years ago, when a student in London, he was found one morning, about four o'clock, scaling the outer wall of the dissecting room, and being reported and brought up before the authorities, it turned out it was for the purpose of dissecting, when, instead of receiving a reprimand for such conduct, Mr. Brook (the then lecturer on anatomy) ordered that the door should be opened every morning at four o'clock for the admission of his energetic pupil.

He had in a remarkable degree the power of grasping and elucidating subjects of an intricate character, in consequence of which he was often appealed to as an arbitrator in difficult negotiations, and so high an estimate had been formed of his honourable character and sound wisdom that his decision was invariably received by both parties as final.

His word was always equal to his bond, neither of which was ever disbonoured. He was an anatomist of the first order, in addition to being a sound pathologist.

So constant was his application to work that, on one occasion, for the long period of twelve years he was never out of his own practice for a day. Athough comparatively a poor man in starting life, his fortune being his education and not over-stocked wardrobe, he died a rich man, leaving a large family amply provided for. He was a staunch liberal in politics, and in days gone by had valiantly fought in this arena, and at the times of his decease was a magistrate of the county of Stafford.

THOMAS CAMMACK, M.D.

THIS able physician of the old school has lately passed away from us crowned with years and honours. Dr. Cammack was born in Spalding eighty-one years ago, and during the time he was in the active pursuit of his profession he had seen the population of his county doubled. After going through the usual routine of apprenticeship, he studied at Guy's and St. Thomas's, under those distinguished surgeons Cline and Cooper, and was admitted a member of the Royal College of Surgeons in 1814, when he immediately commenced practice in his native town, being the first medical man in the locality who held the College diploma. Dr. Cammack might be justly called a "self-made man." His early career was very up-hill work. The secret of his success lay in his untiring energy, indefatigable zeal, and stern determination to surmount every difficulty. He devoted himself to a conscientious discharge of duty among the poor, being not only assiduous and minutely attentive to all their ailments, but invariably manifesting towards them a kindly sympathy which not only won *their* respect but eventually that of every class in the town. In 1834 he obtained the degree of M.D. of the University of Erlangen—not, however, by purchase, but by residence and examination. In 1845 he again submitted to an examination, and was admitted a member of the Royal College of Physicians, London; and in 1859 that distinguished body elected him "fellow," an honour most justly due to him. Dr. Cammack was characteristically reticent, never hastily giving a prognosis. When, however, after careful consideration, his opinion had been formed and elicited, the medical attendant placed implicit confidence in it, and rarely, if ever, did either the patient or the friends find his judgment at fault. We should not be doing justice to Dr. Cammack's memory were we to lose sight of the kindness and benevolence he invariably manifested towards his professional brethren, either during their own indisposition or that of any one near and dear to them. At the sacrifice of his time—nay, his own health—he would most promptly and assiduously, and at any hour

in the night, give his attendance. This benevolence was not confined to the town of Spalding. There are few medical men in its vicinity who have not had ample proofs of his kindness. The death of Dr. Cammack will be deeply regretted by those "troops of friends" who for many years past assembled at his house and partook of his hospitality after the annual meeting of the Medical Book Society, over which he presided. The deceased never courted civic honours, but the respect he commanded in Spalding secured him a seat on the magisterial bench, where he brought to the duties of the office that mature judgment which he had shown in his own legitimate calling.

JOHN BAYLDON, M.B., B.Sc. LOND.

A BRILLIANT university career and an auspicious start in professional life will be associated in the minds of many with the name of this young, accomplished, and most versatile physician, who has just died as acting superintendent of the Ararat Lunatic Asylum, near Melbourne. Mr. Bayldon was a most successful student at the University of Edinburgh between the years 1857 and 1860, taking the diplomas of the Royal Colleges of Physicians and Surgeons after exceptionally satisfactory examinations. While prosecuting his appropriate studies he made many incursions into literature and non-medical science, and not a few *confrères* will remember his vivid and felicitous rendering of the "Republic of Plato" at the fortnightly meetings of the Hellenic Society, and his indomitable energy in geological or botanical research on many a Saturday half-holiday. In 1860 he graduated as M.B. and B.Sc. of the University of London, taking honours in the first examination for the former degree, and obtaining an exhibition in anatomy and physiology, besides a gold medal for proficiency in the same subjects. His skill in botany was such that while in Edinburgh he was appointed lecturer on that subject at the Royal College of Surgeons; and, afterwards, we believe, at the Veterinary School at Cirencester he held a similar appointment. Greater enthusiasm for knowledge *per se* seldom burnt in any breast than in that of John Bayldon; and we once heard him express the characteristic desire to take a "quadruple first" at Oxford—if, indeed, pre-eminence in such an encyclopædic programme was possible. Ill-health, assuming the form of Bright's disease, compelled his departure for Melbourne in 1866, where he continued to add yearly to his already high reputation, till the insidious malady cut him off in the flower of his age. He leaves a widow but no children to lament him; while his old college acquaintances will never fail to cherish the memory of one who was at once the genial companion and the invigorating rival in study, the generous friend, the central light of their circle—a light, alas! which went down while it was yet day.

DR. F. C. JERDON.

A CORRESPONDENT who was well acquainted with the late Dr. F. C. Jerdon, the author of a valuable work on Indian Ornithology, supplies us with the following information:—The doctor spent upwards of thirty years in the medical service of the East India Company, and having a taste for natural history, he enthusiastically availed himself of every opportunity to collect information, particularly as to the habits and instincts of Indian birds and reptiles, his knowledge of anatomy enabling him, as it did the late Sir Charles Bell on other subjects, with advantage to note and remark upon the adaptation of the various specimens of the feathered creation, with which he became so well acquainted during his travels in India.

Dr. Jerdon at all times acknowledged the liberal encouragement he received from our Indian Government in his pursuit of the natural history of India. References to his writings are to be met with in the lately-published works of Darwin and other writers on natural history and philosophy.

It was understood to be Dr. Jerdon's intention to bring out a new edition of his book on Ornithology, which it is to be hoped will be fulfilled, the subject of birds and their uses being at present more than usually interesting. It will readily be acknowedged by those who enjoyed his acquaintance that the doctor's open manners and unselfish disposition endeared him to all.

DR. WIGHT, F.R.S.

DR. WIGHT was born at Ormiston, Haddingtonshire, in 1796, and graduated at Edinburgh in 1816. After making one or two voyages as surgeon to a ship, he went out to India in 1819, Madras Presidency. He was assistant-surgeon, and afterwards surgeon, to the 33rd Native Light Infantry. It is, however, as a botanist of untiring energy and extraordinary sagacity and tact that Dr. Wight is best known. His publications are very numerous, and of great value and importance. They were compiled under circumstances which would have appalled a less energetic man; as it is, they form an enduring memento of his industry. His appreciation of structure and affinities was not less remarkable than his industry. Dr. Wight contributed several papers to various scientific journals on subjects connected with materia medica, as also on matters associated with the cultivation of cotton and other products in India. Dr. Wight became a F.R.S. in 1854 on his final retirement from India. He died on May 26th, at Grazeley Lodge, Reading.

WILLIAM CORBET, M.D., F.R.C.S.I.

WE regret to record the death of this gentleman, which occurred on the 22nd June, after a few hours' illness, aged seventy-eight. Dr. Corbet was medical superintendent of the Criminal Lunatic Asylum situate at Dundrum, near Dublin, having presided over the asylum for upwards of twenty-one years. This institution, although devoted to the treatment of criminal lunatics, whilst under his management was remarkable for the extreme rarity of violence or accident, and for the low rate of mortality, the annual death-rate during his whole term of office being only 3 per cent. on the daily average of patients in the asylum. The deceased was a most estimable and humane member of our profession, and the treatment without restraint advocated by Conolly found in him an able exponent, and the result shows with what success he carried out these views. He was, indeed, worthy of the highest regard as an upright honourable man, and his loss will be widely felt.

WILLIAM SETH GILL, L.R.C.P.

A WELL-KNOWN and much-esteemed practitioner in North London has passed away in Mr. W. Seth Gill, who died on the 31st May, at 4 P.M. Mr. Gill, who was in his seventy-second year, at his death enjoyed an extensive practice, which he retained till within the last few months by his skill, his genial address, and his vigilant attention to the progress of medicine. He took the Apothecaries' Hall licentiateship in 1821, the diploma of the Royal College of Surgeons in the year following, and the licentiateship of the Edinburgh College of Physicians in 1859.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 27th ult.:—

Bull, William, Nenagh, Ireland.
Dustan, Henry, Oaklands, Jersey.
Eastes, Thomas, Folkestone, Kent.
Joynes, Francis James, Chipping Norton, Oxon.

As Assistants in Compounding and Dispensing Medicines:—

Plummer, Arthur, Newbury, Berks.
Goldsmith, John Jackson, Abingdon, Berks.

On the same day the following gentleman passed his First Professional Examination:—

Mason, Richard, St. Thomas's Hospital.

At the recent competitive examination for the prizes in Botany given annually by the Society to medical students who are in attendance on the second summer session of their medical studies, the successful candidates were—

1st.—Augustus Joseph Pepper, University College. A Gold Medal.
2nd.—Robert Edmund Carrington, Guy's Hospital. A Silver Medal and a Book.

UNIVERSITY OF DUBLIN.—The following degrees were conferred on the 26th ult.:—

DOCTOR IN MEDICINE. — Francis Theobald Butler, Edward Jones Cooke, John Joseph Cranny.
LICENTIATE IN MEDICINE.—Thomas Joseph Kelly.

QUEEN'S UNIVERSITY IN IRELAND.—The following have passed the first University examination in Medicine:—

B. C. Burke, Martin F. Cleary, Ludlow T. Colthurst, William Cranston, Maurice Cremeu, M. De Courcy Curtin, Maurice Daly, Francis Davison, Alex. Dempsey, George Dougan, J. E. Foss, Patrick Gorham, George Gowland, James Gray, Henry Grier, Christopher Gunn, John Hamill, Joseph Henry, Edmund Hemsted, Edwin Hemsted, William Huggard, William Jeffries, Edward Kelly, William M'Iver, Horace Mayburv, William Millward, Jariath Mullen, Michael Munro, John O'Callaghan, Simeon Owen, Joseph Parker, Charles Plowman, Norman Pollock, Caleb Powell, Michael Ronan, D. Ross, Charles Sharpe, Edw. Shipsey, Edward Smyth, Michael Sweetman, Charles Wadsworth, Wm. Edward Warren, Michael White.

The following obtained the diploma in Midwifery:—

J. Brown, Ebenezer Sloane, J. King Kerr, Alexander Young, Moses Black, John Knox, John G. Adamson, Robert Evans Burges, John G. Collis, Henry Fogerty, James Graham, Henry Madders, John A. Malcomson, W. E. Bousall Moynan, Bernard O'Connor, Patrick O'Connell, Simon H. Owen, Thos. Patterson, James Ring, J. Scott, William Thompson.

THE Royal Humane Society has just issued some excellent instructions to bathers.

SEVENTY-FIVE deaths from sunstroke occurred in New York on the 2nd instant, and forty-five on the day following.

AT the late Horticultural Society's Congress, held at Birmingham, Mr. Charles Roberts, F.R.C.S., read an excellent paper "On Sulphur as a parasiticide; and on Sulphozone as a substitute for it."

ON Monday the Bishop of London presided at the ceremony of opening the new wards of the Hospital for Hip Diseases in Children, Queen-square. This institution will now be able to receive fifty in-patients.

DR. BAYLIS, the Medical Officer of Health for Birkenhead, has issued his report of the sanitary condition of Birkenhead (and Claughton) during the past year, from which it appears that the death-rate was considerably in excess of that of previous years.

BEQUESTS, &C., TO MEDICAL CHARITIES.—Mr. Joshua Lockwood, of Hawley House, Southamptonshire, bequeathed £5000 to St. George's Hospital, £2000 to King's College Hospital, and £1000 to the Royal Hospital for Incurables. Mr. Creswell Creswell bequeathed £500 to the Leicester Infirmary and Fever House, and £100 to the Leicester Provident Dispensary.

PRESENTATIONS.—Mr. H. S. Leverton, of Truro, has been presented by the Odd Fellows Society of the town with a handsome silver centre-piece, together with an address on vellum—"In recognition of Brother Leverton's unwearied kindness and attention to the members of the lodge as their surgeon for the long period of twenty-one years."—C. B. Mosse, Esq., Staff Surgeon P.M.O., was, a few weeks back, presented with a most gratifying testimonial by the inhabitants of Cape Coast, previous to his sailing for England.—Mr. J. Moir, L.R.C.P.E., of Camelford, Cornwall, was recently presented with a testimonial and purse of sovereigns, on the occasion of his leaving the neighbourhood.

THE LEVEE.—At the recent levée held at St. James's Palace by his Royal Highness the Prince of Wales on behalf of Her Majesty, the following presentations were made:—Surgeon Walter F. C. Bartlett, R.N.; H. Barber, M.D., 5th Administrative Lancashire Rifle Volunteers; Dr. Fleetwood Buckle, R.N.; Staff Surgeon-Major T. G. Fitzgerald; Dr. Frank; Surgeon-Major Dr. J. Fayrer, C.S.I., Bengal Army; Professor Gross, D.C.L., of Philadelphia; Mr. Samuel Gross, Surgeon R.N.; Deputy Inspector-General of Hospitals N. Hefferman, M.B.; Dr. Thomas Ligertwood; Dr. J. A. Lush, M.P.; Dr. Minter, Inspector-General of Hospitals; Deputy Inspector-General of Hospitals W. Munroe, M.D., C.B.; Mr. MacCormac; Staff Surgeon William Ross, M.D., R.N.; Deputy Inspector-General Dr. Rutherford, C.B.; Sir Henry Holland and Sir Galbraith Logan; Drs. Vernon Bell, Hinckes Bird, Brewer, Thomas King Chambers, Frederick Farre, Day-Goss, Gream, Jonas R. Leake, Lowe, MacCormac, Alexander Marsden, W. M. Muir, C.B., Nicoll, Charles D. F. Phillips, Poore, Frederick G. Reed, Leonard Sedgwick, and Swettenham; Messrs. Oscar Clayton, Du Pasquier, Robert Ellis, Fraser (Surgeon-Major), Cæsar Hawkins, Prescott Hewett, and T. S. Wells.

Medical Appointments.

ADDIS, P., M.R.C.S.E., has been appointed House-Surgeon to Addenbrooke's Hospital, Cambridge, vice G. Lucas, M.R.C.S.E., resigned.

BARNARDO, F. A. E., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for Division No. 1 of District No. 3 of the Northleach Union, Gloucestershire.

BLACKBURN, J., M.R.C.S.E., has been appointed a Consulting Surgeon to the Beckett Hospital and Dispensary, Barnsley.

CRONYN, J., L.K.Q.C.P.I., has been appointed a Medical Officer to the Infirmary for Diseases of the Eye and Ear, Dublin.

DIVER, T., M.D., M.R.C.S.E., has been elected Medical Officer to the Workhouse, Portsea Island Union, vice T. P. Simpson, M.D., M.R.C.S.E., resigned.

FORD, J., M.D., has been appointed Medical Officer for the Chawleigh District of the Crediton Union, Devon.

GROVES, E., L.R.C.P.L., M.R.C.S.E., L.M., has been elected Medical Officer to the Workhouse and Industrial Schools, Bermantofts, Leeds Union.

HACKNEY, J., M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Hythe District of the Elham Union, Kent, vice H. C. Wildash, M.D., resigned.

HEY, S., F.R.C.S.E., has been elected a Consulting Surgeon to the General Infirmary, Leeds, on resigning as Surgeon.

JACOB, A. H., M.D., has been appointed a Medical Officer to the Infirmary for Diseases of the Eye and Ear, Dublin.

JEFFERY, E., M.R.C.S.E., has been appointed a Consulting Surgeon to the Beckett Hospital and Dispensary, Barnsley.

KENNEDY, E., M.D., has been appointed a Medical Officer to the Infirmary for Diseases of the Eye and Ear, Dublin.

LEE, R. J., M.D., has been appointed Assistant-Physician to the Hospital for Sick Children, Great Ormond-street, vice F. B. Nunneley, M.D., resigned.

LYELL, R. W., M.B., M.R.C.S.E., has been appointed House-Physician to the Seamen's Hospital, Greenwich, vice Young, whose appointment has expired.

MASTERMAN, G. F., M.R.C.S.E., has been appointed Medical Officer for the Burnham District of the Eton Union, vice W. S. Wilson, L.R.C.P.L., M.R.C.S.E., resigned.

MAXWELL, T., M.B., B.A., B.Sc., has been appointed House-Physician to Addenbrooke's Hospital, Cambridge, vice W. A. Brailey, M.B., B.A.

MAYNE, R. F., L.R.C.P.Ed., M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for District No. 1 of the Honiton Union, vice J. H. Jerrard, M.D., M.R.C.S.E., deceased.

MYRTLE, A. S., M.D., has been appointed Hon. Consulting Physician to the Harrogate Bath Hospital.

PARSONS, F. J. C., L.R.C.P.I., M.R.C.S.E., has been appointed Medical Officer to the Middlezoy Friendly Society, Middlezoy, Bridgewater, vice E. Carse, L.R.C.P.Ed., L.F.P. & S. Glas., deceased.

PATCHETT, W. A., M.R.C.S.E., has been elected Senior Assistant Medical Officer to the Workhouse Infirmary, New Bridge-street, Manchester, vice A. Harris, M.R.C.S.E., deceased.

PENTLAND, H. T. DE M., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Leominster District and the Workhouse of the Leominster Union, vice D. Davies, M.R.C.S.E., resigned.

PORTER, F. T., L.K.Q.C.P.I., has been appointed a Medical Officer to the Infirmary for Diseases of the Eye and Ear, Dublin.

SMITH, E., M.D., M.R.C.P.L., F.R.C.S.E., has been appointed Visiting Physician to the East London Hospital for Children and Dispensary for Women, vice A. Pullar, M.D., resigned.

SPENCE, J. B., M.D., has been appointed Assistant Medical Officer to the Staffordshire Lunatic Asylum, Burntwood, vice E. C. P. Fox, M.B., resigned.

STEWART, W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed a Consulting Surgeon to the Beckett Hospital and Dispensary, Barnsley.

Births, Marriages, and Deaths.

BIRTHS.

ALLINGHAM.—On the 25th ult., at Whitefriars, Chester, the wife of J. H. Allingham, M.R.C.S.E., of a son.

ELLIS.—On the 25th ult., at Newcastle-on-Tyne, the wife of Richard Ellis, L.R.C.P.Ed., of a daughter.

GORDON.—On the 28th of May, at Bermuda, the wife of W. L. Gordon, M.D., Staff Surgeon "Royal Alfred," of a son.

HOOD.—On the 28th ult., at Upper Berkeley-street, the wife of W. P. Hood, M.D., prematurely, of a daughter.

PERRY.—On the 28th ult., at Charlwood-street West, St. George's-road, the wife of G. Perry, M.R.C.S.E., Assistant-Surgeon Scots Fusilier Guards, of a son.

MARRIAGES.

HIBBERD—ADAM.—On the 27th ult., at St. Paul's, Westbourne-grove, Edward Hibberd, M.D., to Anna Bella, daughter of Joseph Adam, Esq.

OLDMAN—MAULE.—On the 26th ult., at Godmanchester, Charles Edmund Oldman, M.R.C.S.E., to Beatrice, daughter of Edward Maule, Esq.

DEATHS.

COLCHESTER.—On the 29th ult., T. Colchester, M.R.C.S.E., of Bushey-heath, Herts, late Surgeon Royal Artillery, aged 70.

EVEREST.—On the 28th ult., at Mayland-road, Shepherd's-bush, Geo. James Everest, M.D., aged 77.

FITZPATRICK.—On the 1st inst (after a short illness), at Lenham, Kent, John Fitzpatrick, M.D., Surgeon-Major H.M.'s Indian Army (retired), aged 64.

M'DOWALL.—On the 27th ult., at Great Malvern, Robt. M'Dowall, M.D., of Cheltenham, aged 85.

SMITH.—On the 20th ult., J. G. Smith, M.D., of Union-terrace, Aberdeen, aged 45.

SUFFIELD.—On the 23rd ult., Wm. H. Suffield, M.D., of Letterfrack, Co. Galway, aged 56.

Medical Diary of the Week.

Monday, July 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, July 9.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, July 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—1 P.M. Meeting for Election of Officers.

Thursday, July 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, July 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 13.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

APPLICATION OF PHOTOGRAPHY TO ILLUSTRATIONS OF NATURAL HISTORY.

PROF. AGASSIZ, of Cambridge, U.S., has recently called attention to this subject in connexion with some recent advances that have been made in carbon printing by the Woodbury and the Albert processes. The accuracy of a photographic illustration is, of course, far beyond that of an engraving or lithograph; and as soon as a few practical difficulties of printing the separate figures of a plate at one impression are overcome, it is considered that zoological memoirs can be accurately and economically illustrated. As specimens of what can be obtained by the Albert and the Woodbury processes, and in order to afford a good idea of the character of the two modes of printing, Prof. Agassiz gives two admirable plates taken from the illustrations of his forthcoming "Revision of the Echini." The one is a figure (natural size) of *Echinocidaris punctulata* from South Carolina, printed by the Albert process; the other, a section of *Lagenum decagonalis* from Hong-Kong, printed by the Woodbury process; both negatives, of course, being taken from nature.

Mr. Edward Skinner should address a letter to the Secretary of the National Hospital for Epileptics, Queen-square. A letter of recommendation from a governor or subscriber will probably be necessary.

Dr. Clifford Allbutt's paper shall be inserted as soon as possible.

THE VOLUNTEER MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Permit me to mention, for the information of volunteer medical officers, that Mr. Secretary Cardwell has requested me to draw up a written statement of the questions which they desire to bring before his notice.

I am, Sir, your obedient servant,
JOHN MURRAY, M.D.,
Assistant-Surgeon London Scottish Rifle Volunteers,
Hon. Sec. Volunteer Medical Association.

Bryanston-street, Portman-square, July, 1872.

ASYLUM LITERATURE.

IT is often a very difficult thing to devise means for the healthful recreation of the unfortunate inmates of our lunatic asylums. The English climate is a treacherous one; out-door exercises are not always practicable, and in-door amusements are very limited in number. Under these circumstances, superintendents of asylums have been recommended to add a "little dabbling in literature" as a resource for their patients. Several of the largest asylums in Scotland possess a publication or journal of some kind, which is mainly conducted by the patients themselves. This "mad literature," as it is termed, occasionally contains articles that are every bit as interesting as some of those met with in "sane literature." And in England, the inmates of Church Stretton (Shropshire) Private Asylum have brought out a magazine of their own. It originated in an effort by Dr. W. Hyslop to divert his patients from unhealthy thoughts. The June number contains some lines by "Anything but a Fool," which fully justify the author's opinion of himself; and if everything said and done by another writer, signing himself "One who is thought Insane," were like his portrait—by word painting—of a gentleman, we should be inclined to think him sane enough.

Another Foreign Graduate.—There is no doubt much truth in what our correspondent says regarding the Medical Directory and foreign graduates, and we hope the next edition will afford evidence of a greater supervision on the part of the Editors.

Mr. Lewis Angell's paper shall be published in our next impression.

TREATMENT OF MEDICAL MEN BY EACH OTHER.

To the Editor of THE LANCET.

SIR,—A few days ago Mr. A. called on me in a great hurry, and requested me to go and see his wife, and, whilst on our way to his house, I ascertained that she had been in labour about two hours, and that Dr. C. had been engaged to attend her, but was not then at home. I found the lady in strong pains, the os well dilated, and told them that there was every probability of the child being soon into the world. When I had been in the room about an hour and a half, in walked Mr. B., an entire stranger to me, who seemed rather astonished at finding one of the male sex present. I introduced myself to him on hearing the lady say, "O, doctor, I'm so glad you've come," or something to that effect, and remarked that "I supposed they had sent for him." His reply to my query was inaudible, and at the same time rendered unnecessary; for he went forward to the bedside, examined the lady, muttered something about its being all right, and left the room, without saying a word to me. Imagine then my surprise when a few minutes afterwards Mr. A. called me out of the room, stated that Mr. B. would not consent to act whilst I was there, but that he (Mr. A.) could quite understand the manner in which I had been treated, and would expect to pay me the same as if I had completed the case if I would send him a memorandum of the matter. Not seeing any signs of Mr. B., I left the house.

Will you kindly inform me if this is the usual manner in which the senior members of the profession treat the junior ones; for if so, I confess I am disappointed. Such a meeting as this, in the presence of two ladies and a nurse, I fear would not be very conducive to any good opinion to be entertained by them of the junior. I feel quite confident that had I been someone's unqualified assistant, I could not well have been treated with more apparent contempt than I was in this instance. As I have hitherto laboured under the impression that men high up in the profession, as Mr. B. is said to be, met younger men with a certain show of courtesy, perhaps you will kindly inform me if I have been deceived. Mr. B., I have since learnt, claimed the case as well as the fee. Dr. C., of course, means to demand his fee. Am I entitled to anything under the circumstances, having wasted two valuable hours in midday?

Yours respectfully,
July 1st, 1872. L.M.

*** Supposing our correspondent's account to be accurate, he seems to have been treated with very scant courtesy by Mr. B., for which we can see neither excuse nor explanation in the circumstances of the case. It is greatly to be lamented that medical men do not consider each other more in the varied and delicate positions in which they are inevitably placed. But our correspondent has the great satisfaction of having acted courteously and kindly. He is quite entitled to a fee from the husband of the lady, unless he chooses to forego his claim in consideration of Dr. C. We all may happen to be out of the way when wanted, and should be ready to act for a brother so circumstanced. But this conduct implies mutual courtesy and consideration.—ED. L.

Mr. Samuel Munro.—It depends upon the date at which they appear. To borrow a phraseology of which we have lately heard so much, if they have simply "grown out" of a condition of ill-health following the specific disease, they would not be a source of infection.

C. D.—Messrs. Hopkins and Williams' address is 5, New Cavendish-street, W.

DISINFECTION BY DRY HEAT.

Mr. John Bradbury, (Cheltenham.)—The application of heat is the most reliable method of disinfecting clothes and bedding. The experiments of Dr. Henry, of Manchester, long ago indicated the efficacy of *dry* heat for this purpose.

ERYTHROXYLON COCA.

To the Editor of THE LANCET.

SIR,—I see that one of your correspondents wishes to know if Erythroxylon coca is used in this country. I have personally used it for the last twenty-five or thirty years, and found it exceedingly useful, specially in hot weather, as a stimulant or reviver. It is very good also when added in small quantity to ordinary tea. A digestive and truly "pick-me-up" liqueur is made of it, and would be a boon to many if they knew the advantages which can be derived from its use. It seems to act also as a slight antiseptic, besides possessing many other qualities.

Yours faithfully,
Leicester-street, Regent-street, June 20th, 1872. RICHARD VERITY.

SANITARY STATE OF BERLIN.

ALL who contemplate a *promenade à la Berlin* this summer should be aware that the hygienic conditions of that city are the reverse of satisfactory. The broad, navigable watercourses have been converted into open sewers. Always malodorous, they are now worse than ever, and, thanks to the rapid increase of the town, are rendering it almost uninhabitable. The most aristocratic quarter and the Thier-Garten (the famous park in the western outskirts) are suffering from vapours as pestilential as ever ascended from the Pontine Marshes. Municipal disagreements have postponed the one remedy—that of subterranean sewerage—to the Greek Calends, and the Government is loudly called upon to interfere. Why not, it is asked, issue an injunction against defiling the waters while no proper canalisation exists? If a portion of Berlin can get on with the Parisian system of nocturnal carts, so might the entire town until some more refined and less noisome method has been adopted. Mortality is rapidly on the increase—4 per cent. in 1871, as against 2½ in 1867. Meanwhile the cholera is fast approaching from Russia, and *The Times* correspondent exclaims, "God protect Berlin if it visit us this year!"

Mr. E. C. Ling.—The paper has not been received at the Office.

THE LATE DEATH FROM CARBURETTED HYDROGEN.

To the Editor of THE LANCET.

SIR,—In THE LANCET for June 15th you notice a death from the escape of carburetted hydrogen gas at Plymouth. As I was one of the medical men present on that occasion, a short account of it may be acceptable to you. My notes, taken shortly after the occurrence, are as follows.

On June 8th, about 7 P.M., I was called to see some people supposed to be poisoned by coal gas. On my arrival a few minutes afterwards I found the wife of the grocer dead; she had apparently been so for an hour or more. The face was pallid and composed. She had recently, within a fortnight, been confined. Owing to her being subject to chronic bronchitis, she lay with the head higher than either the infant or nurse, and in consequence was more affected by the gas. The infant, who lay much lower down, was not materially affected by it.

The nurse, aged about fifty-seven, was lying quite insensible; respiration slow; pulse slow and feeble; countenance somewhat livid; pupils contracted; breathing occasionally stertorous. Once or twice she had a species of convulsion; limbs were convulsed, and she bit her tongue. Artificial respiration, cold affusion, hot coffee, brandy, and faradaism (primary current) were resorted to. Under the influence of the latter she would speak incoherently, and it caused contraction and rigidity of the limbs, arms more especially. It was applied to the phrenic nerves, the præcordial region, and the spine. At first she swallowed with difficulty, but this improved after a time; the pupils also dilated, and acted with light. In the evening croton oil was administered. The next morning she was quite conscious, but remembered nothing of the circumstances. She gradually got well.

The room in which these parties were found was of a good size; but every aperture, windows, door, and fire-place, had been scrupulously closed. It appears that in the evening the husband noticed an odour of gas, and found a slight leak in the tube under the floor, leading to a small gas-stove. He imagined he stopped it; but it is probable that he lighted it, and did not extinguish it; the flame then melted the solder at a joint, and the solder in falling off put out the flame, and allowed of a large escape of gas. The wife herself was incapable of smelling or tasting anything. This would partly account for her not perceiving it. The husband heard her coughing at 4 A.M., so it must have taken four hours at least to have caused death. There did not appear to be anything abnormal in the temperature.

I remain, Sir, yours truly,

Plymouth, July 1st, 1872. GEO. JACKSON.

Mr. T. Osborne Walker, (Birmingham.)—Apply to the Registrar, Dr. Francis Hawkins, 32, Soho-square, W. There is no fee for alterations of addresses in the Medical Register.

Dr. L. W. Anderson will see that the subject of his communication is discussed in our present number, as well as in a previous one.

THE TEA QUESTION.

To the Editor of THE LANCET.

SIR,—There is one aspect of the tea question to which I would like to see a little more prominence given, and that is the great neglect of vegetable food (excepting bread) which may be observed amongst workers in the manufacturing districts, more especially to be seen in those families where all the grown-up members are workers, and the consequent frequency of illnesses in which symptoms of scurvy are more or less prominent. Indeed I have seen one or two cases of scurvy as severe as ever I have seen it amongst sailors, and I have had a little experience in the matter, having been medical officer of a ship in which the voyage was very much protracted. The preserved vegetables, lime-juice, &c., being exhausted, we had several sailors attacked with scurvy in a pretty severe form. The mode of life in some of these families is something like this: The father, mother, and grown-up children are all at work in the day; they come home at night tired out, and will have very little inclination either to pay proper attention to the cooking or the character of their food. They, therefore, take what will give them least trouble in these particulars. The staple food is butcher's meat, tea, bread, and butter. There are many families in which potatoes or vegetables are very seldom tasted. If we take this to be a correct view of the case, we will have, in addition to the symptoms produced by them on the nervous system, hot water on the stomach, &c., those produced by the want of proper vegetable food, which will considerably aggravate the case. Now, I think if we could get these people to pay a little more attention to this, we would by so much diminish the severity of the symptoms. I have seen the greatest number of these cases in the cotton districts. Of course it will be understood that all families do not live as I have described; but a certain percentage do, and it will be in these very families where, the symptoms being more prominent, the medical man's attention will be the more likely to be early engaged.

I am, Sir, your obedient servant,

Rugeley, July 3rd, 1872. ROBT. COOKE, L.R.C.S. Ed.

REGISTRATION OF BIRTHS AND DEATHS.

THE Government Bill for amending the Registration Acts, of which we were enabled last week to indicate the leading provisions, is now printed, it having been introduced in the House of Lords by the Earl of Morley. It is, therefore, obtainable as a Parliamentary Paper at Hansard's, Great Queen-street, and its sessional number is 179.

Mr. John Fairman.—We do not agree with our correspondent, and we cannot revive an exhausted controversy.

Heidelberg should apply again to the respective Universities for information.

Microscopist can obtain the cells and apparatus of Messrs. Murray and Heath, of Jermyn-street.

Expectans will perceive that his request has been anticipated in the last number of THE LANCET.

SMALL-POX AND ITS TREATMENT.

To the Editor of THE LANCET.

SIR,—I have just seen the communication of Mr. R. C. Furley in your issue of May 25th, in reference to the "Treatment of Small-pox by Vaccination and the Injection of Lymph," and having now a case under treatment which does *not* bear out the gentleman's experience, but the contrary, I deem it of sufficient interest to report it in brief.

H. S——, a child of eighteen months, was seized with convulsions on May 23rd, 1872. No cause for convulsive seizure could be discovered. Convulsions ceased under five-grain doses of chloral every two hours. Next day (24th) the eruption made its appearance. I immediately vaccinated the child (which had not been vaccinated previously). The eruption ran its usual course; the vaccination took on the fourth day, and both ran their course *pari passu*. The eruption was quite discrete, the papules being very much scattered when I vaccinated the child. There was no secondary fever, which I attribute, not to the vaccination, but to moderate doses of quinine, which I give when the vesicles begin to become purulent—half a grain to one grain doses every two hours for children; two grains and a half for adults.

Other physicians of this city have had similar experience as to the influence of vaccination upon the course of small-pox when the latter disease has fairly developed before the lymph is introduced into the system. Of course we use the dried crust. Yours, &c.,

Baltimore, U.S., June 6th, 1872. WM. C. KLOMAN, M.D.

To the Editor of THE LANCET.

SIR,—As an appendix to Dr. Ducat's case of Malignant Small-pox, I send the following.

J. D——, aged forty-six, sent for me on Thursday, March 28th. He complained of incessant vomiting during the previous night and violent headache; no pain in the loins. I endeavoured to alleviate the sickness.

March 29th.—Vomiting ceased; headache continued. I expressed fear that small pox (then prevailing) would ensue.

On Saturday morning he was rather better. At 10 P.M. a slight appearance of eruption like scarlatina on the chest.

On Sunday I was informed he was worse. I took a medical friend with me, examined the whole body, and found purpuric blotches all over the chest and abdomen, some already livid; no eruption of small-pox pustules. The patient could take nothing. I sent him a bottle of wine, but he could not take it. From this time till 6 P.M. the hæmorrhagic appearances rapidly increased; the eyes appeared one mass of blood, and at the above hour the patient sank.

In this case there was nothing to indicate small-pox, although I could not account for the symptoms on any other ground. My diagnosis was confirmed about ten days later, as the widow, daughter, and son had small-pox in succession, but happily recovered. Yours, &c.,

Ipswich, June 26th, 1872. HENRY P. DRUMMOND, M.D.

To the Editor of THE LANCET.

SIR,—Allow me to state that I have found the mineral-acid treatment to be the most successful in small-pox. I always persevere with the following medicine from the commencement:—Dilute nitric acid, one drachm and a half to two drachms and a half; chloric ether, one drachm to two drachms; water to eight ounces: half an ounce to an ounce to be taken every four hours, according to age. In conjunction with this I give supporting diet, as milk, beef-tea, &c., along with wine (if signs of exhaustion supervene). By adhering to this treatment I have brought through several confluent cases of a malignant type. Yours truly,

Leeds, June 28th, 1872. H. A. ALLBUTT, L.R.C.P. Ed.

To the Editor of THE LANCET.

SIR,—I see in THE LANCET of last week that you allude to the prevalence of small-pox amongst us. As you have been wrongly informed upon some points, I thought it well to write and acquaint you with the real state of affairs.

The number of deaths in this parish during the last four weeks have been as follows: 7, 22, 34, 19. By this you will see the deaths slightly decreased last week; but again they are entirely on the increase this week. At present the epidemic has existed almost entirely amongst children, there having been only two deaths amongst adults since the outbreak. The statement that small-pox exists in almost every house is not correct; but in some streets hardly a house has escaped. In one small street I visited yesterday 14 houses; in most of these there were two, three, and even four cases of small-pox. The great evil seems to be that vaccination has been very imperfectly enforced. It is a rare thing to meet with a case of small-pox in a child who bears the marks of vaccination. Out of 59 deaths which have occurred in my practice from small-pox since the 12th of April, only one was vaccinated, and that child I myself vaccinated during the stage of incubation. It took effect, and the attack was certainly modified; but pneumonia came on, and the child really died from that cause.

According to the direction of the Board of Health, I am making a house-to-house inspection, with the view of having every house that requires it whitewashed and disinfected. I believe the Board is prepared to erect a hospital should the epidemic extend itself to the adult population. At present they are of opinion that it would be useless, as very few mothers would consent to have their children removed, and the law gives us no power to compel them. I remain, Sir, yours truly,

HUGH R. KER,
Medical Officer of Health, &c.

Cradley Heath, Staffordshire, June 26th, 1872.

A COUNTY COURT DECISION AFFECTING POOR-LAW MEDICAL OFFICERS.

THE following decision by a County Court Judge may be of interest to Poor-law medical officers. The case, as reported in the *Hereford Times*, is that of an action brought by Mr. Kerbey, a surgeon, residing at Weobley, to recover from a farmer, residing at King's Pyon, the sum of £1 1*s.* for professional services rendered to a servant of the defendant's. The patient, who was an in-door servant to the defendant, was sent by his master to the plaintiff's surgery on account of a broken arm. On the strength of the message delivered by the servant, the accuracy of which does not appear to have been disputed, the plaintiff undertook the surgical treatment of the case. The defendant urged that he was overseer for his pariah, and that he had sent the boy to Mr. Kerbey in his official capacity as one of the medical officers of the Weobley Union. The Judge decided that, as the consolidated orders of the Poor-law Board required a note in writing, and in the present case no written order had been sent, the defendant was liable, and gave judgment for the full amount with Court fees.

THE communication of *Dr. Savage* (Nent Head) is acknowledged with thanks.

MEDICAL ETHICS.

To the Editor of THE LANCET.

SIR,—In reply to Mr. Moses Taylor, I must beg most positively to deny that I have ever visited and taken charge of his patients when he has been in attendance upon them, and I call upon him to state when I ever did so. Upon several occasions have I been summoned to visit people, and finding Mr. Taylor in attendance, have left the house without even seeing the patient; and when I am informed that he is attending, I invariably decline to go, unless the friends previously inform Mr. Taylor that his services are no longer required, and that I have been called in—a line of practice I have adopted with regard to Mr. Taylor in self-defence, as against his practice of visiting and taking charge of any case he may be called to. I will only mention now that I have upon different occasions written to Mr. Taylor, asking him for an explanation of his conduct. My letters have been read and returned to me; indeed my last letter to you he cut out of THE LANCET, and forwarded to me in an envelope addressed in an impertinent manner.

I am, Sir, yours, &c.,

Cannock, July 1st, 1872. J. CAMPBELL MACAULAY.

P.S.—I am authorised by a brother practitioner to state that for years past he has experienced the same treatment as myself at the hands of Mr. Taylor.

To the Editor of THE LANCET.

SIR,—Scarcely a week elapses that one or more letters headed "Medical Ethics" or "Medical Etiquette" do not appear in your columns, and angry discussions take place, extending sometimes over several weeks. The utility of this correspondence may be questioned; for of what interest is it to the profession at large, and what deterrent effect has it on the offenders, that publicity should be given to the fact that Mr. A. has acted unprofessionally towards Mr. B., or *vice versâ*? Surely there must be something radically wrong on both sides that these quarrelsome people cannot settle their petty squabbles by themselves. Would it not be better for them, as it undoubtedly would be for the profession at large, to follow the advice of an old saying, and "wash their dirty linen at home." On the other hand, the mischief done by these public controversies is, I think, evident. We exhibit the profession under its worst aspect, and we present it, in addition to its being very like a trade with its sale of drugs, as containing men who have a morbid desire, like petty tradesmen, to appear in print at any cost. These questions of medical etiquette seem usually to have for basis £ *s. d.*, and it certainly is degrading to find that we have among us some men who will do any ungentlemanly act for the sake of securing a patient, and others who are so fond of the £ *s. d.* that they will actually make themselves as bad as the delinquents by the means they use to prevent the former from gaining their object.

The subject is a serious one, and I can point but to one remedy: that, as access is too easy to our profession, by having more stringent preliminary examinations we shall obtain in our ranks men whose education and training will place them above making petty squabbles public, and make the same in rank as clergymen and barristers, who we must allow at present hold precedence.

I remain, Sir, yours faithfully,

June, 1872. H. R. L.

PRACTICE AND PRECEPT.

A CORRESPONDENT informs us that a lady, having recently been appointed the editor of an anti-vaccination journal, has taken the sensible precaution of getting thoroughly well vaccinated before entering upon her duties.

Se non è vero è ben trovato.

Mr. W. Swan.—The matter shall receive attention next week.

VISITING AND PRESCRIBING DRUGGISTS.

To the Editor of THE LANCET.

SIR,—A small druggist in a certain town, formerly dispenser to an old practitioner here, is in the habit of visiting and prescribing for people, and in every way conducting himself as if he were qualified. He is, in fact, doing a practice of £400 or £500 a year. Several of his patients die; but he protects himself by calling in at the last moment either his old master, or a surgeon lately come here, and who by penny clubs for domestics, and by pandering to this man, is degrading the profession, and affording protection to a quack. Some time ago we tried to form a Medico-Ethical Society in the town, when these two men seized the opportunity of spreading injurious reports to the effect that we had clubbed together to raise our fees. Expense would be no object if success were certain; but failure would never do. We have several cases against him, and could subpœna many whom he has attended, &c., without any medical man seeing them.

Yours obediently,

June, 1872. M.R.C.P.

*** If the druggist alluded to dispenses medicines to the patients whom he visits and attends, he seems to us amenable to the Apothecaries Act. We advise our correspondent to submit the case to the Apothecaries' Company. The Act of 1858 does not appear to be violated there being no assumption of false titles.—ED. L.

THE PATENT FELTED PAPER CURTAINS.

AMONGST the novelties of the International Exhibition at South Kensington, not the least remarkable is the new felted papers of Messrs. Pavy, Pretto, and Company. All the windows and doors of the Exhibition are fitted up with curtains of this new material, which is a paper into which a certain quantity of animal fibre has been intimately felted. The effect is to give a remarkable toughness to the fabric, without any very great addition to the cost. Curtains, blinds, and bed furniture of the most beautiful patterns are produced at astonishingly low prices, and it is fully expected that the new material will replace leather in the covering of chairs, the binding of books, &c. The feature to which we desire to draw special attention is its superiority over cotton and woollen materials for the curtains of sick-rooms. It is non-absorbent, is easily brushed, and is not likely to retain contagion.

Mr. Paul Belcher, (Burton-on-Trent.)—We regret that we could not give earlier attention to the subject; but the delay was unavoidable, owing to the press of other matter and the publication of the index.

THE ELIMINATION HYPOTHESIS.

UNDER the above title an article appears in the *Indian Medical Gazette* for May, which seems to point out so sensibly the inconsistencies of argument into which Dr. Johnson and other recent supporters of the doctrine of cure by elimination have foundered, that we reproduce it. We agree with the writer as to the importance of clear definitions in this matter, and the impossibility of allowing the advocates of eliminative treatment to base such an important rule of practice upon a theory which they state with all the licence of language that belongs to the old-fashioned vitalism, while professing to hold the modern doctrines of physiological chemistry and physics:—

"We need hardly remind our readers that a controversy is at present going on in England between two parties—the one represented by Dr. G. Johnson, holding that the eruption of small-pox, scarlet fever, measles, and the vomiting and purging in cholera are unquestionably curative efforts of nature to excrete noxious materials from the circulation; the other party, led by Dr. Clifford Allbutt, maintaining that we have no grounds for asserting that the elimination of the poison of small-pox is due to conservative efforts of nature, but that specific poisons of this description set up in the bodies of those subject to their influence a definite action in the active tissues, a 'mode of motion sufficiently like their own to give it hold, and sufficiently unlike to cause great perturbation, and that cure consists in the completion of a certain cycle of changes, the definiteness of which is shadowed forth in the definite tide which these diseases observe.' The morbid poison in leaving the body simply follows the path of least resistance; there is no tendency, in fact, for poisons to rush from within the body outwards, which is not shared in like degree by food or other indifferent substances.

"It would be a desirable practice if men, writing on medical matters, would commence their work with a preamble setting forth the meaning of doubtful expressions and words used. For instance, it would have been instrumental towards understanding Dr. Johnson's pathology of cholera had he prefaced his works by giving us the meaning he attaches to expressions such as 'the curative effort of nature,' 'secretory eliminative effort of nature,' and so on. In fact, unless we can define the meaning attached by authors to such terms as these, it is impossible to discuss doctrines respecting controversies which may have arisen regarding their ideas of disease. The present is a case in point. Dr. Johnson now holds that he invariably used the term nature to express *functions of the living body.* It is difficult, however, to understand how this definition of nature can be substituted for the word nature in the following passages taken from Dr. Johnson's writings:—'The vomiting and purging which occur in epidemic diarrhœa and in cholera are salutary and curative efforts of nature to separate from the blood and to cast out of the body the noxious materials which constitute the essential cause of the disease'; 'if the curative efforts of nature have not been interfered with by art'; 'the disease has a natural tendency to terminate in recovery'; 'the salutary efforts of nature, by which the morbid poison was being eliminated, were arrested.' Dr. Johnson, in explanation of his meaning, and to enforce his argument, quotes with approval from Sydenham, who writes that 'by checking the disease at its outset I should wear out the patient by intestine war, since I should confine the enemy to his seat in the bowels, should impede the *natural* evacuations, and detain those humours which were seeking for an outlet.' On this idea, and similar passages from Annesley's works, Dr. Johnson sums up the matter by asserting that 'it can scarcely be doubted that this is the true pathological interpretation of the intestinal discharges, and that they are the result of a very active secretory eliminative effort'; 'the unaided powers of nature are often found to be insufficient for the evacuation of the stomach and intestines.'

"It seems to us hardly possible to believe that Dr. Johnson, when writing these sentences, really intended to express by 'nature' 'the functions of the living body,' but rather with Sydenham, and the older authors, to attach to this term the idea of 'the self-mending power of the body'; and if so, clearly Dr. Allbutt has just reason to object to doctrines of the kind as being a part of that mischievous verbiage which the older authors on medicine were wont to employ, using words without considering their meaning, and so greatly hindering the progress of medical science. The profession, we think, should be grateful to those who, from time to time, bring us to our bearings on these matters, especially as by so doing they expose themselves to sneers, such as those contained in a contemporary journal, against Dr. Allbutt. That gentleman, however, is probably accustomed, as we are, to be informed that we are misguided and ignorant people, by those who have no more effective weapons at their command with which to meet propositions advanced subversive of their pet theories. If the members of our profession could but free themselves from the limbo of 'nature,' 'epidemic influences,' and such like meaningless expressions, how much broader our ideas regarding diseases such as small-pox, measles, and cholera would grow."

Enquirer had better consult some authority on the literature of painting—say Mr. G. A. Sala or Mr. Tom Taylor.

Cerebrum.—The "protuberance annulaire" of French writers corresponds exactly with our pons Varolii.

BENEFIT SOCIETY FOR SICK MEDICAL MEN.

A CORRESPONDENT, under the signature of *Valentia*, would be glad to ascertain if any Society exists which extends its benefits to medical men during illness by the payment of yearly subscriptions, in connexion with life assurance or otherwise.

Hiram Abiff.—Of the two examinations, perhaps that of the Hall would be the more convenient to our correspondent.

Mr. W. Whitehead's communication shall be noticed next week.

CONVALESCENT HOMES.

To the Editor of THE LANCET.

SIR,—Seeing in *The Times* of to-day the warm approval of Convalescent Homes within easy reach of London expressed by you after visiting the one at Highgate, which is the gift of Sir Sydney Waterlow, I venture to bring to your notice a small Cottage Home for London female convalescents which I have established here, close to the Palace gardens, and within an invalid's walk from the railway station. I have no committee and no subscriptions; it is on quite a small scale as to numbers, and entirely under my own supervision.

In my little Home for Invalids at Hope Cottage, Hampton Court, I receive four inmates at a time; no infectious cases, and no cases of serious illness—convalescents only. The inmates are to be women from London, of good character (or sometimes a child), of the class of servants, needlewomen, or trade-people. They defray their own journey, and pay (in advance) 5*s.* a week. A lady sending an invalid pays 7*s.* 6*d.* a week for her, but no entrance money. If the invalid leaves before the end of her time, the money will be returned. The general time of staying is about three weeks, more or less according to the doctor's opinion. Every invalid must either have a certificate from her own doctor, stating what her illness has been, the sort of diet she needs, and for how long she requires the rest and change of air, or else present herself to Dr. Fitzpatrick, at his house, 30, Sussex-gardens, Hyde-park, any day before 12 o'clock, for his approval of the case. I will give brandy or wine when required, if told by the doctor what quantity to give. My invalids have each a separate bed-room; they must bring a pair of thick shoes for exercise, and change of body linen. When strong enough they are expected to help in light household work—making their own beds, and preparing the table for meals, &c.; they must be punctual at meal hours and at morning and evening prayers, and not go out without leave. Invalids may receive visits from their friends on Saturdays between two and four o'clock; but no visitor is allowed to bring anything to eat or drink into the cottage, and no refreshment is ever to be offered to any visitor at the cottage. Invalids are not allowed to buy for themselves anything to eat or drink without the permission of the housekeeper, and any invalid disobeying her or opposing any of the rules will be sent away. The housekeeper receives her directions from me alone, and any complaint or request, or wish for information, is to be referred to me. Yours, &c.,

Hampton Court Palace, June 21st, 1872. JANE BOURCHIER.

P.S.—Hope Cottage is on the Hampton Court road, about fifteen minutes' walk from the Hampton Court station, where flys are to be had if wanted. Anyone inquiring at the station for "Lady Bourchier's Convalescent Home" will be directed to it.

Mr. J. E. Fordyce.—There are no means of producing a local accumulation of fat. Rest, good food, and a quiet disposition lead to deposition of fat; but it is general, not local. Local accumulations of fat, like those on the posteriors of the Hottentot female, are due, in all probability, to sexual selection.

VOLUNTEER SURGEONS.

To the Editor of THE LANCET.

SIR,—The truly curious regulations recently published for the edification of volunteer surgeons have afforded army surgeons some little amusement, not unmixed with some small cynical satisfaction. The joke, of course, lies in the charming official gravity with which such conditions are promulgated for the acceptance of civilians, who, although patriotic doctors and soldiers on parade, are generally supposed to be in their private capacity independent gentlemen. The satisfaction, on the other hand, if such it be, rests in the fact that the profession, as a body, can now fairly estimate the value attached to medical services by the gentlemen of the quill in Pall-mall.

Oh, ye budding aspirants of our schools and colleges, who, although ye may have no stomach for regular army assistant-surgeoncies twenty years long, are yet panting for volunteer medical honours, think on the generous "tuppence" a week, not for your officially estimated worthless advice only, but also for your more or less valuable physic! The dole (recognised by the crossing-sweeper with a touch of the hat, if pocketed with bare civility by the café waiter, and wholly spurned by the saucy cabby, who wants a trifle extra for "summat 'ot") is, nevertheless, yours as volunteers (after due examination), and will be paid quarterly in arrears if receipted on soul and conscience! Think on it, ye amalgamated joiners—wielders of the saw and plane,—who are now striking and contending for ninepence an hour; your professional body carpenters, who handle scalpel and stethoscope, are offered twopence a week, and have, moreover, to find their own sticks and glue-pots!

Notwithstanding protests, fancy can picture for some time to come at all military stations where a P.M.O. and two regulars are available, numbers of volunteer surgeons trooping down for "examination," in order that they may secure a grateful country's "tuppences"! Imagine also the satisfaction to some distorted minds of being able to "pluck"—well, perhaps even the hospitable mayor of a burgh! But why talk of plucking generous gentlemen, who would be willing to give not only advice and attendance free gratis for nothing, but even full doses of quinine and iodide of potassium to aguish adjutants and staff sergeants when attacked by their old enemies—shivers and pains! Moreover, undue strictness might lessen the popularity of the army medical department, and induce jealousy of that body, now in such a splendid position as regards general prospects and promotion! But a truce to banter. Volunteer surgeons may feel annoyed; but are they not really more considerately treated than their regular army medical brethren? While the latter as a body are allowed to die slowly, yet painfully, from utter stagnation in all promotion and future prospects, the former more mercifully get their *coup de grâce* at once! Yours obediently,

June, 1872. M.D.

THE WORKHOUSE OF EAMONT BRIDGE.

THE guardians of Eamont Bridge have discussed the recommendations of Mr. Cane, Poor-law inspector, as to the imperfect accommodation afforded by their present workhouse. They examined at some length the medical officer, Dr. Robertson, as to the physical and moral condition of the inmates. They have no special fever ward, children sleep and live with adults, and three or four lunatics live in the same wards with the rest. This, at any rate, ought not to be a happy family. The Board seemed more anxious to justify itself and its arrangements than to do what was obviously necessary, even by its own confessions, for the paupers. Clearly the children should be boarded out or kept separate from the adults, and as clearly lunatics should be sent to an asylum; and a fever ward is urgently required.

Dr. M. Long, (Dalston.)—1. The fee of 2*s.* 6*d.* for a quarterly visit to a pauper lunatic is only paid in respect of such lunatics as may be rightly left in the custody of their friends, and is paid to insure some supervision of them. A person for whom the 2*s.* 6*d.* could be rightly claimed would not require a certificate for removal.—2. The fee is half a guinea.—3. If the district medical officer gave a certificate in due form, fulfilling all legal requirements, the guardians would, we should imagine, be bound to pay his fee. If he only gave a letter to the relieving officer, on which that functionary removed the lunatic to the workhouse, and there had him technically "certified" by the workhouse medical officer, that gentleman would claim the fee. At Nottingham the guardians have a contract with the workhouse medical officer, under which certificates of lunacy for inmates carry no extra payment, and they remove all insane people from the out districts into the house, and keep them there for a few hours before sending them to an asylum, in order to have them certified without cost.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Teevan; Prof. Humphry, Cambridge; Dr. Waters, Liverpool; Dr. Robert Lee; Mr. Skinner; Dr. Sedgwick; Mr. Roberts; Mr. Belcher, Burton-on-Trent; Dr. Underhill, Summerfield; Dr. Fox, Broughton; Mr. Shaw, Chesterfield; Mr. Heaps, Rothwell; Dr. Hogg, Woolwich; Mr. Staffurth; Mr. Munro, Birmingham; Mr. E. le Dewe, Abbeville; Dr. Smiles; Mr. Somerville; Mr. Warren, Hanwell; Mr. Allingham, Chester; Mr. Donovan, Carlow; Dr. Hebert, New York; Mr. Hawkins; Mr. Davies, Cardigan; Dr. Stone, Coleraine; Mr. Miller; Mr. Forbes; Dr. Muir; Mr. Aling; Mr. Salmon; Mr. J. Danby; Dr. Savage, Alston Moor; Mr. Pradbury, Cheltenham; Dr. Voorst, Amsterdam; Mr. Knight, York; Mr. Laing, South Stockton-on-Tees; Dr. Murray; Dr. Baxter; Mr. Hansford, Sydenham; Mr. Kean, Stamford; Mr. James; Mr. T. Powell, Hungerford; Mr. Lowndes, Liverpool; Mr. Hopwood, Buxton; Mr. Gregory, Hartlepool; Mr. Kempshall; Mr. Rogerson, Watford; Mr. Henry, Newcastle-on-Tyne; Mr. Bandeld, Epsom; Dr. Browne; Mr. Langford, Ilfracombe; Mr. Watson; Dr. Walker, Edgbaston; Mr. Macaulay, Cannick; Mr. Stevenson; Dr. Allbutt, Leeds; Mr. Williams; Mr. Clayton; Mr. Kendrick; Mr. Wright; Dr. Drummond, Ipswich; Dr. Lowndes, Egham Hill; Dr. Diver, Caterham; Mr. M'Call; Dr. A. T. Watson, Dresden; Mr. Davids, Weston-super-Mare; Mr. Coles, Tredegar; Dr. De Genlis, Okehampton; Mr. W. Draper, Uppingham; Mr. Harvey, Cheam; Mr. Groves, Lincoln; Dr. Woodward, Worcester; Dr. Ling, Saxmundham; Dr. Grant, Longton; Mr. Crisp, Walton-on-the-Naze; Mr. R. Cooke, Rugeley; Mr. Ellison; Dr. Jackson, Plymouth; Mr. Clarke, Leeds; Mr. Wheeler, Cork; Mr. Horton, Leicester; Mr. Locke, Weybridge; Mr. Gream, Seaford; Mr. Wear, Ampthill; Mr. L. Angell; Mr. Hampson, Uttoxeter; M. le Valery, Paris; Mr. Armstrong; Mr. Turner, Richmond; Mr. Durnford, Foxton; Mr. Jones, Glasgow; Mr. W. Barnes; Mr. Finlason, Cape Coast; Miss Faithfull; Mr. Greenway; Mr. Richards, Chesterfield; Mr. M'Rae, Woking; Mr. Caldwell, Stockport; Mr. Denton, Brighton; Mr. Blackburn, Barnsley; Mr. Smith, Chester; Mr. Laver; Mr. Sharman, Coleford; Dr. Hoile, Cork; Mr. Macnamara, Uxbridge; Dr. Fenn, Fletching; Mr. Benson, Hull; Mr. Jervis; Mr. W. Wigmore, Callender; Dr. Baber; Mr. Carsten, Jedburgh; Mr. Beach, Callington; Mr. Baines, Hampton; Mr. Budd, Folkestone; Mr. Morgan, Haverfordwest; Medicus; An Assistant; Another Foreign Graduate; Cerebrum; C. D.; Patented; Beta; Enquirer; L.M.; Heidelberg; H. R. L.; &c. &c.

Wrexham Guardian, Dublin Evening Mail, Royal Cornwall Gazette, Blackburn Times, Hastings Observer, Huddersfield Chronicle, Croydon Advertiser, Hampshire Telegraph, Le Bordeaux Médical, Loose Leaves, Liverpool Daily Post, South London Journal, Amateur Chess Magazine, Cumberland Advertiser, Medical Archives (Saint Louis), *Medical Temperance Journal*, and *Food, Water, and Air* have been received.

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